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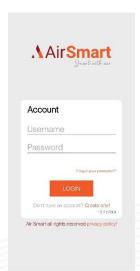
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1 Creating an account and logging in

To use the mobile application, you need to make an account. This way your data can be stored correctly, and your ICTUS ventilation unit is properly secured.



Creating an account is easy. On the landing page of the application you are given the option to log in. If you already have an account you can log in by entering your information and clicking the 'Login' button. If you do not have an account yet, you can simply click on 'Create one!' to create an account. This link will redirect you to the registration page.

On the registration page, you must enter your personal data to create an account. The following

should be taken into account:

- 'Username' must be unique.
- 'Email' must contain a valid email adress
- 'Password' must comply with the following rules:
 - Be at least 8 characters long
 - At least 1 capital letter
 - o At least 1 lowercase letter
 - At least 1 number
 - o "Repeat password" must be identical to "password"
- You must read and agree to the terms and conditions.



After completing all the details and clicking the 'register' button, a confirmation email will be sent to the email address you entered. Before the account can be used you have to click on the link in the email. Once this is done you can log in. Make sure to look in your spam mailbox if you don't find the email in your normal one.



2 Creating a location



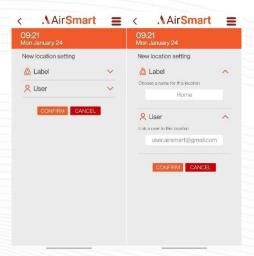
Now that you have access to the app, you need to go through a few steps to before you can control your unit. The first step in this process is to create a location in the application.

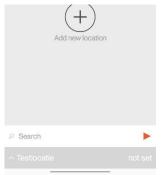
To create a location, click on the '+' button in the middle of the screen. This button will take you to the next screen where you can enter the necessary information to create a location.

On this screen, you will find two closed sections, one called 'Label' and another called 'User'. If you unfold these you can fill in the necessary information.

Under 'Label' you can give your new location a name. Under 'User' you can add a user to your location. This so that when the location is created an installer can be added to calibrate and install the ventilation unit for you.

When you have filled out all the information (only the label is mandatory, 'user' is not) you can click on the 'confirm' button which will create the location and bring you back to the home screen.





Now you can see your newly added location underneath the search bar. It is possible to add multiple locations. A location is representative of a ventilation unit that is installed, if you have a ventilation unit installed in different locations (e.g. second home) then you can also control them from the same app. You don't need to create a separate account for this. If you have many different locations you can quickly search for the right one by using the search bar, it will filter your set locations based on your search.



3 Pairing the unit

If you open a location, you can view and manage the linked ventilation unit. If you have not yet paired the unit it will also be mentioned here and a button will be visible, which will send you to the page to pair your unit. For this action you have two options:

- 1. Pairing using a Wi-Fi signal (Android only)
- 2. Pairing by scanning a QR code

For finding and pairing the device the two options run separate, once the link to the device is made the process runs identical for the two.

3.1 Pairing using a Wi-Fi signal (Android only)



When you choose to pair by Wi-Fi signal click the second button 'Start searching devices'. This button will specifically search for networks created by ICTUS ventilation units. From this list you are going to choose the right device to link to the location. Once you have found the device, click on it and you will be asked for confirmation to connect to that network (temporarily). Click connect. You will now be redirected to the next page where all available Wi-Fi networks are visible. If you see multiple devices and you do not know exactly which network to connect to, you still have the option to scan the code to connect to the ventilation unit.

Note: when searching with Wi-Fi, your location feature (GPS) must be switched on, on your phone!

3.2 Pairing by scanning the QR code

For pairing by scanning a QR code, click on the 'Start scanning' button. Your camera will now open (after giving the right permission) and you can start scanning. When you choose this option, you need to open the cover of the control section of the unit (marked by the orange arrow) and scan the QR code found here on the inside. You can also find the QR code on the packaging box or in the manual. Once you have successfully scanned the code your application will try to connect to the network transmitted by your unit. When successful, you will be navigated to the page where you can choose from the available Wi-Fi networks.





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Scan DATA_MATRIX code on your





For the remainder of the process, pairing is again the same for both options (Wi-Fi signal or QR code). You are now on the list of available networks. From this list, choose the network you want to connect the unit to (your home network). You are then going to have to provide the password for this (home network password).

When this all goes well the unit will connect to your home network and you will be brought back to the home page. If you check under location you should now see your ventilation unit paired (marked by a green dot).

4 Managing location

4.1 Adding users

After you created a location you can give other accounts access to it. This way you can have multiple people within your family/company control the ICTUS unit.

To add users go to the configuration of your location. In this menu you will see the option 'Manage permissions'. Under this option you can manage the different users.





If you open this menu you will get a list of the users who have access to the location (initially this is only the creator). One of the users will always have a crown behind his/her name, this user is the owner of the location.

Below this list you will find '+ add user', this link allows

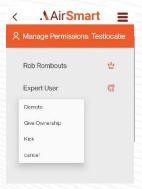
new users to be added. Keep in mind that the users you want to add must have an active account for the AirSmart application.

When you click on this link, a pop-up opens asking for a 'username' or an email address. Based on this input, the new user is added (the new user does not have to do anything for this).

After the user has been added, his/her permissions can also be modified. This is done by clicking on the user, which will open a menu with a number of options:

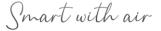
'Promote'/'Demote': these options allow you to give the user more ('promote') or less ('demote') rights to the location.

- 'Give ownership': this makes the user the owner of the location.
- 'Kick': this will remove the user from your location
- 'Cancel': this will close the menu again



.\AirSmart

Pwm Supply: 20 PWM Extraction: 2





4.2 Notifications

Under the location menu you find a 'notifications' item. Under this item all notifications and error messages from the unit will be displayed. The most common notification relates to the replacement/cleaning of the filters. If you replaced/cleaned the filters you can indicate so by clicking on 'reset filter'. Now the notification will disappear.

Other error notifications that might occur:

- 1. 'Fan 1': This notification indicates that fan 1 is not running or is not receiving power.
- 2. 'Fan 2': This notification indicates that fan 2 is not running or is not receiving power.
- 3. 'Calamity': You get this notification when the calamity contact is not properly inserted. Plugging it in properly will make the message disappear. This notification is always accompanied by the 'Fan 1' and 'Fan 2' notifications. So if you get these three messages, make sure you check the calamity first.
- 4. NTC x: You get this notification when one of the temperature sensors is broken. Having the sensor replaced will make the message disappear.

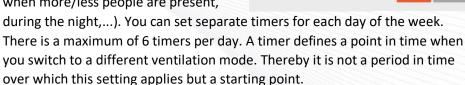


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4.3 Set up timers



It is possible to set up timers for your unit. This will allow you to manage your ventilator speed automatically when you need more or less airflow at recurring moments (during cooking, when more/less people are present,



(+)

To add a timer go to the 'manage timers' item in the 'location configuration'.

Under this menu you can choose the day for which you want to set/adjust the timer.

To add a timer for a particular day go to that day and click on the + icon. This will add an empty timer where you can set the start time and the mode in which the ventilation should run. You can also copy and paste the created timers.

Smart with air



5 Settings

Under the "settings" menu, you can adjust a number of settings. As a normal user you can only adjust daily settings. Whereas an expert has acces to all settings.

5.1.1 Label

Under the item 'label' you can change the name of the location. This can be done by entering the new name and clicking on 'confirm'.



5.1.2 Operation mode

With 'operation mode' you can choose which system is used to control the ventilation unit. You have three options here. It is always possible to control the ventilation unit with the supplied remote control.



- Wired: This mode is activated when you pair the ventilation
 Boost time
 unit with a home automation system or with a standard wired 3 stage switch.
- Rf: This is the most common mode. In this mode, you can control the unit with the 4 stage Rf transmitter.
- Sensor: the control of the ventilation unit is done by the sensors that are installed. Depending on the values, the unit will change modes.

5.1.3 Boost time



With this option you can determine how long you want the boost mode to run before it switches back to the previous mode.

5.1.4 Delete/Leave location

When you're the owner of the location, you get the option to delete it ('delete location'). Pressing the button 'confirm', will delete your location. Attention! The location will be deleted for everyone, not just for you. Before deleting the location, make sure to unpair the ventilation unit that is connected to it.



If you are not the owner of the location, you will see 'Leave location', which allows you to leave the location.



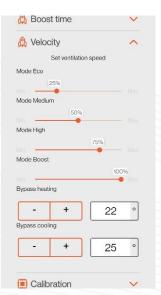
6 Expert settings

As an expert user, you have access to a more advanced set of settings. These settings are normally set only once at start up and do not need to be changed again.

6.1 Velocity

The parameters under 'velocity' determine the speed of the fans for each mode in which the unit can be running. These parameters are set when starting up the unit. Depending on which mode the ventilation unit is set in ('PWM' or 'constant airflow', see 5.2 Calibration for detailed info) the sliders have a slightly different meaning.

- 'PWM': When the unit is calibrated in "Constant PWM" mode, the speed of the fans is controlled by the amount of power supplied to the fans. When calibrating, a maximum value is set for the ventilator speed. The percentages in the 'velocity' are matched with this (100% in 'velocity' = ceiling value from calibration)
- 'Constant Airflow': When the unit is calibrated in "Constant Airflow" mode, the speed of the fans is determined by the airflow that has to be delivered. So the amount of power and rotor speed of the fans is variable and the airflow is constant. Here again a maximum value is set during calibration (here in m³/h instead of %). The percentages in the 'velocity' are aligned with this (100% 'velocity' = ceiling value from calibration)



'Bypass heating' and 'Bypass cooling' are two variables used to customize the bypass valve. Using these variables, you can decide when you want the bypass valve to open (and skip heat recovery from the heat exchanger).

The "Bypass heating" variable is the desired outside temperature that it must be before the bypass opens. Furthermore, the inside temperature must be at least 2 degrees colder than the set temperature.(otherwise it misses its effect)

The 'Bypass cooling' variable is the minimum indoor temperature it must be for the bypass valve to open. Here the outside temperature must be at least 2 degrees colder but not colder than 12°C (to prevent condensation in you duct system).

These bypass functions allow you to automatically manage free heating or cooling when conditions are feasible. Furthermore, the bypass valve can also be used to bring in clean fresh air (e.g. in rainy weather) to regulate your indoor climate, this can be done by manually opening/closing the bypass valve in the app.





6.2 Calibration



Before a ventilation unit can be used, it must be calibrated to match the necessary airflow needs of the room(s). This ensures that there is not too much neither too little airflow provided in each room. For the calibration of the unit there are a

number of different possibilities split into two approaches.

At the start of a calibration you can choose the direction in which the unit will be installed ('left' or 'right') The ICTUS has been developed in such a way that no inconvenient mounting constructions have to be made to ensure a correct direction of airflow.



6.2.1 Constant PWM



For calibration in the constant PWM setting, 100% power supply for the fans is taken as the starting value. When starting the calibration in this setting, the ventilation unit will bring itself to the maximum power. When the unit is ready for calibration a box will appear showing the

percentage at which the fans are running. Here you can increase or decrease the value until the desired results are achieved. When this is done you can click the 'Adjustment done' button and you will be taken back to the expert settings menu.



6.2.2 <u>Constant Airflow</u>



For calibration in the "constant airflow" setting, we base ourselves on the flow rate that has to be delivered. Here we start from the initially set maximum flow rate value. There are two different approaches to tune the airflow setting (manual or automatic). The advantage of working with airflow in a constant flow is that regardless of external factors (pollution of the filter,...) the same ventilation performance is maintained. With a constant power level, the flow rate goes down with dirty filters.



Constant Airflow – Manual



In Manual mode, we proceed in the same way as in PWM only here we are looking at the airflow values and not the power supply to the fans. Again we start from the maximum value, and when the unit is ready for calibration we can adjust the different fans in

airflow delivery. This can be determined by taking airflow measurements when opening or closing certain valves or thus providing optimal flow delivery.

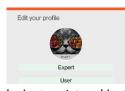
6.2.4 Constant Airflow – Automatic

In Automatic mode we set an airflow rate in advance as a starting point, from this starting point the ventilation unit itself will (automatically) take the correct measurements to provide the correct airflow. This process takes a lot longer than the constant PWM or Manual variant because a lot of processing work is done by the unit. However, this results in less residual work for the installer. Once the ventilation unit is ready for calibration, minor adjustments can be made to compensate for any small leaks in the ducts, if necessary.

Adjusting profile data

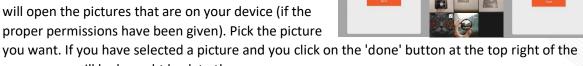
From the home page there are two ways to edit your profile information:

- In the center of the screen, you see an overview of your profile information and your profile picture, in the upper right corner of this section is a button in the form of a pen that takes you to the profile page.
- 2. By opening the menu at the top right and going to 'manage profile'.



To edit your profile picture, simply click on your profile picture (on the profile page). This opens a pop-up with a

'select a picture' button and a 'next' button. To choose a new picture, click on 'select a picture'. This will open the pictures that are on your device (if the proper permissions have been given). Pick the picture



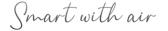
screen, you will be brought back to the pop-up. If you now click 'next' you will be taken back to the profile page where you can see your new profile

picture (Note! This can sometimes take a while depending on the file size of the photo)



Expert User

A Manage Profile





8 FAQ

8.1 Creating an account and logging in

8.1.1 Email address already used

When you get a notification that your email address is already in use it means that an account already exists in the system with that email address. If you are not sure how to log in to this account you can always choose the 'forgot password' option. Here you can enter your email address and an email will be sent that will allow you to reset your password. After resetting your password, you can login again with your new password.

8.1.2 Validation problems with creating an account

There are some validation rules on the account creation fields. This to keep your account secure (e.g. password rules) and to ensure that the information is correct.

If you cannot create an account because the rules are not met, you will receive a message telling you what information is still incorrect/missing.

8.1.3 Login error

If you are trying to log in but it fails, we always recommend to first close the application completely and remove it from temporary memory. This way all the temporary data will be reset. If this does not solve the problem there may be several possibilities:

- 1. Your login information is wrong. If you do not remember your exact login details, you can use the forgotten password option to reset your data.
- 2. You are not connected to the internet. To use the application, you always need an internet connection, because controlling the unit is also via the internet. Check whether you have an active internet connection and try again.
- 3. You have not yet confirmed your email address. After creating an account, a confirmation email will be sent. Only when you have clicked on the link in this mail and you received confirmation that your email address is confirmed you get access to your account.

8.2 Creating a location

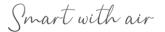
8.2.1 Location not visible

You have just created a new location and it is not visible in the app. We recommend logging out and closing the app completely and logging in again.

8.3 Pairing

8.3.1 The unit is not found.

You are in the process of pairing the unit but it does not show as available. When the unit is switched on (connected to main power) there should be lights on the lid. If there are no lights it means that the unit has no power. If the unit is connected to main power and no red LED lights are on, it should be visible to pair. If the unit was previously functional, it is possible that the it is still paired with the previous account. If you are the new owner of the unit, you can reset the unit by pressing and





holding the reset button on the control panel for 10 seconds. This should cause the unit to be ready for pairing again.

8.3.2 The unit is not shown after pairing

As a first action we recommend logging out and closing the application completely and restarting it. If the unit is still not paired it means that something went wrong while making the network connection. The most common error is entering the network key incorrectly. Try the entering the key again. Other errors can be due to the home network.

8.4 Managing the location

8.4.1 Notification doesn't disapear

When you have received a notification from a location, it usually means that something is wrong in the device. You can get rid of the filter notification by cleaning or replacing the filters and clicking on 'reset filter'. The other notifications are not easy to get rid of. These require maintenance by a professional. Make sure to let the maintenance person know what error message (notification) you received so they can work efficiently.

8.4.2 A user you added does not see the location

When you add a user, it should be an activated account. If you want to add an account that is not yet activated you will receive an error message. If you do not get this error message but the user is not added then we recommend logging in again and trying again.

8.4.3 A user does not get the permissions you assigned

Once you have added your users it is possible to give them different permissions. There are 4 levels of permissions: owner, installer, maintenance, user. When you change someone's level, they will get different permissions (more or less). If the user's rights are not changed, we recommend logging in again. This way the profile will be reloaded and the changes made should be carried out.

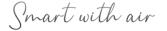
8.5 Expert settings

8.5.1 Boost time does not match real time

If you notice that the duration you have set does not match the time your ventilation unit is running in boost mode, there might be an imbalance in the system. The best way to fix this, is to adjust the timer and then set it back to your desired value. This should update the value of the timer. NOTE: If the unit is no longer connected to the internet the updates you do will no longer be made. To fix this you need to reset the ventilation unit, if you follow the steps in section 7.3.1 you can solve this.

8.5.2 Velocity – function bypass

There can be several reasons why the bypass valve does not open when the programmed temperature is exceeded. The internal factors are provided to protect your system against freezing or condensation, but also to keep your indoor climate as optimal as possible.





8.5.3 <u>Calibration</u>

8.5.3.1 After calibration, the temperatures are incorrect

If after calibration you notice that the temperatures in your overview are wrong (outside temperature and inside temperature are reversed) it means that the direction of the device was initially set incorrectly. Because the device is bidirectional, it can be set in a left or a right mode. When the outdoor and indoor temperatures are reversed, the controller is taking "fresh air" out of your home to ventilate the outdoor air, which is the opposite of what we want. Therefore, it is important to pay attention that this setting is set correctly during the start up. To solve this, you can go back to the calibration start screen and adjust the direction there. This will signal the ventilation unit to reverse its direction and ventilate in the correct direction. You do not need to start the calibration again for this.

8.5.3.2 Calibration is blocked

When the calibration crashes, you can close the application and restart it. This will take you back to the home screen, from here you can start a new calibration. Keep in mind that your device will remain in calibration mode and thus will run at 100% (depending on the progress in the calibration). Starting a new calibration discards the old one.

8.6 Updating your profile

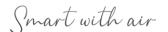
8.6.1 Profile picture is not updated

If your profile picture does not seem to adjust, we recommend logging in again. If you still don't see the modified picture, something went wrong during the upload, or it was interrupted too soon. Keep in mind that the new profile picture has to be uploaded so the larger the picture and the higher the quality, the longer the upload will take. Be sure to wait until you have seen your profile picture change on the profile page before proceeding.

8.7 Other problems

Sometimes it may happen that by using the app many times and switching often between accounts the app's cache fills up. The best solution for this is to close the app completely and empty the cache memory, then log in again.

In general you can always try to log out and in again when a problem occurs. If this, or the provided answer above do not work, you can send an email to our helpdesk. Write to info@airsmart.pro with the subject "ICTUS APP: " + your problem! If you do not start the subject with this, the mail may not arrive correctly.





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