

Troubleshooting

Quick overview of the Comfort365 system. The Comfort365 thermostat is installed in the downstairs living space, a sensor is installed in the upstairs bedroom space and two dampers are installed in the ducts that control the airflow to the upstairs and downstairs spaces. Some installations may have two sensors installed, one in the upstairs bedroom hallway and one in the master bedroom.



Thermostat



Sensor



Damper

Identify the model and version number of the thermostat. This information can be found on a label on the bottom of the thermostat (the part that faces down towards the floor). Note it below.

Model # _____ Version # _____

WiFi Disconnected

If there have been no changes to your home WiFi network password, the thermostat may just need a Power Reset. See the instruction below regarding a power reset. Only 15-30 minutes off the wall is needed. Make sure the batteries are not in the thermostat when you reinstall it. Give the thermostat several minutes to reestablish the WiFi connection.

Thermostat Flickering / Acting Up

Power reset the thermostat. Remove the batteries from the thermostat by pulling down the battery cover on the face of the thermostat. Next remove the thermostat from the subbase on the wall by pulling the thermostat directly away from the subbase. Don't twist as you might break the pins on the back of the thermostat. The thermostat display should go completely blank. Let the thermostat sit for about 30 minutes off the wall, completely depowered. After 30 minutes put the thermostat back on the subbase without the batteries. Ensure that the plastic tabs on the subbase are inserted in the holes on the back of the thermostat and that the pins are lined up with the terminals when attaching the thermostat to the subbase. Reinstall the batteries. You can also try a factory restore. Press and hold the blank key that is to the left of the Fan key for about 7 seconds until you see Option 1. Press and hold the Next key until you see Option 22 (Model C365T11) or Option 25 (Models C365T21 or T21WF). The option will display as FR No. Press the Up key to display FR Yes then press Enter. You should see all of the segments light up then return to a normal display with factory settings. Change the time, System and Set To temperature as needed.

nP Message

The thermostat is powered by the equipment. An nP message indicates that the thermostat is not receiving adequate power from the equipment. The batteries only serve as a backup to maintain the time.

- Check your breakers for both your inside furnace unit and the outside AC unit.

- Remove the thermostat from the wall and inspect the pins on the back of the thermostat, paying attention to the top two pins on the right side of the back of the thermostat. Also, inspect the wiring on the subbase, looking for any loose wires or terminals with wires that have not been tightened.
- “Jumpering” will verify if the problem is an equipment problem versus a thermostat problem. With the thermostat removed from the subbase on the wall, take a picture of the wiring so you have a reference. At the subbase, remove the wire that is inserted into the R terminal and insert the R wire into the Y terminal along with the Y wire and tighten the terminal. This should activate a cooling call as soon as the wires are connected, and keep the cooling on as long as it’s jumpered. If cooling DOES NOT come on, then it’s likely an equipment issue and a technician needs to be called to diagnose the problem. If cooling DOES come on, then it may be a thermostat problem or a problem with the dampers (See below). Return the R wire to the R terminal by loosening the Y terminal, and removing the R wire. Keep the Y wire inserted in the Y terminal and tighten the terminal. Reinsert the R wire into the R terminal and tighten the terminal. The cooling should go off after a few minutes.
- If cooling came on, check to see if the dampers may be causing an issue. The damper wiring is on the right side of the subbase. Remove the wire that is inserted into the COM terminal for the upstairs/sleeping damper. Tape the end of the wire so the wiring is not exposed and label as Up. Remove the wire that is inserted into the COM terminal for the downstairs/living damper. Tape the end of the wire so the wiring is not exposed and label as Down. Tuck these wires in a bit. Place the thermostat back on the subbase, making sure all of the pins line up. Does the thermostat power up? Does it display nP. If the thermostat no longer displays nP, then the problem is with one of the dampers. Please contact us.

nS Message

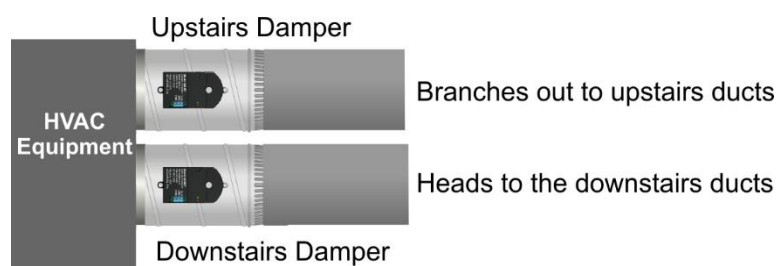
nS is displayed when the thermostat is not detecting the sensor correctly. Most nS messages are caused by a broken or loose pin. Remove the thermostat from the wall. On the back of the thermostat, inspect the pins, specifically the bottom pin on the left side and the bottom pin on the right side. If you notice a loose or broken pin, please contact us. Also inspect the wiring on the subbase, specifically the TS wiring, looking for any loose wires or terminals with wires that have not been tightened

Test Airflow

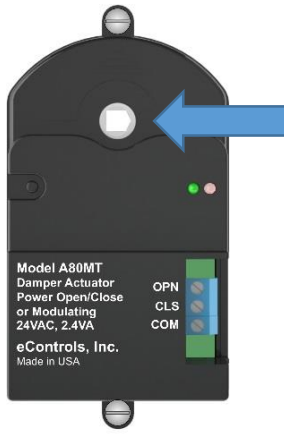
At the thermostat, press the Airflow % area then use the up arrow to increase airflow to 150% to the upstairs sleeping space and 50% to the downstairs living space. Compare the airflow upstairs against the airflow downstairs. You should feel more upstairs. If not, see Troubleshooting Airflow below. Now reverse the airflow. Press the Airflow % area then use the down arrow to increase airflow to 150% to the downstairs living space and 50% to the upstairs sleeping space. Compare the airflow to the downstairs against the airflow upstairs. You should feel more airflow downstairs. If not, see Troubleshooting Airflow below.

Troubleshooting Airflow

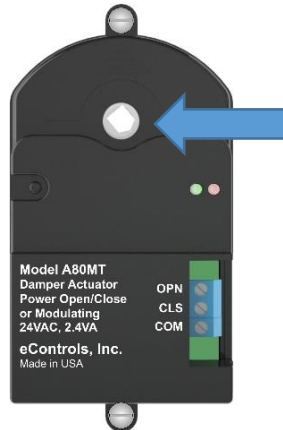
Locate the indoor equipment, usually in the attic, garage or utility closet. Now locate the two dampers that are installed coming off of the indoor equipment. One damper will be controlling the ducts feeding the upstairs rooms and a second damper will be controlling the ducts feeding the downstairs rooms.



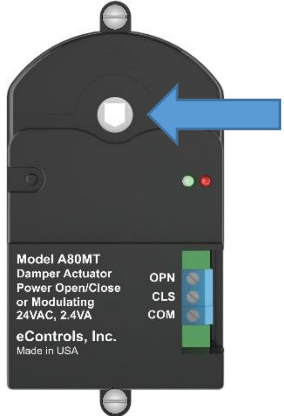
The motor on the damper has an LED that displays what the damper is doing. If the damper is open (100% or more airflow), the LED will be green. If the damper is partially closed (less than 100% airflow) the LED will not be lit. If you see a red LED, this indicates a wiring issue or an issue with the motor on the dampers.



Open Position
Green LED and the point of the "house" points in the 3 o'clock direction.



Partially Closed Position
No LED and the point of the "house" points in the direction between 3 o'clock and 6 o'clock.



Closed Position
Red LED and the point of the "house" points in the 6 o'clock direction.

You should not see a red LED in this system and/or the point of the "house" pointing in the 6 o'clock direction. This could indicate a wiring issue or an issue with the damper motor. Please contact us.

Perform the Airflow Tests below and verify damper behavior. Note your results below.

Your Damper Behavior

Set Airflow to 100%

Both damper LEDs = Green

Set Upstairs Airflow to 150% and Downstairs to 50%

Upstairs damper LED = Green

Downstairs damper LED = Not lit

Set Downstairs Airflow to 150% and Upstairs to 50%

Upstairs damper LED = Not lit

Downstairs damper LED = Green

If you find that one of the motors does not respond as expected, you will need to determine if it's a motor problem or a thermostat problem by swapping the motor with the other damper motor.

Dampers located near each other

If the dampers are located near each other, it may be possible to just swap the motors without removing the wiring. Remove the two screws and remove the motor from the damper. Make sure the blade spins freely 360°. Swap the motors and perform the Airflow Tests again. If the motor on the “bad” damper performs correctly, then a replacement motor is needed. If the “bad” damper still doesn’t perform correctly, then a replacement thermostat is needed.

Dampers not located near each other

If the dampers are not located near each other, you will need to remove the wiring from the motors. Make sure to take pictures of the wiring before removing any wiring. Remove the wires and then remove the two screws and the motor from the damper. Make sure the blade spins freely 360°. Swap the motors, rewire according to your pictures and perform the Airflow Tests again. If the motor on the “bad” damper performs correctly, then a replacement motor is needed. If the “bad” damper still doesn’t perform correctly, then a replacement thermostat is needed.

If you have any questions, please contact us.

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