

AutoTstat Instruction Manual

Introduction

Dear user of this Energybox Product, this Instruction Manual will guide you through the Installation and Setup of AutoTstat.

What's in the Box

The package contains the following items:

- AutoTstat
- QR Code for Documentation

Safety Instructions

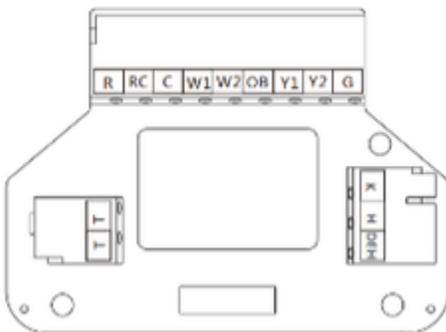
The Installation of the AutoTstat device should only be done by certified electrician/technician.

Mounting Instruction

There are two options to install the AutoTstat. The first one is a new installation which will require a new wiring or as a replacement of an existing thermostat. As the device communicates with the SuperHub via RF wireless communication it needs to be within reach.

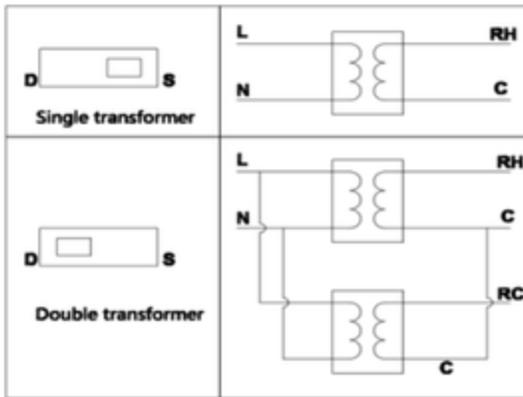
AutoTstat assembly preparation

Unpack the Thermostat and release the back plate by using a flat head screwdriver. This part is used for wall mounting and the electrical connection via terminals. The terminal designation can be seen in the following illustration.



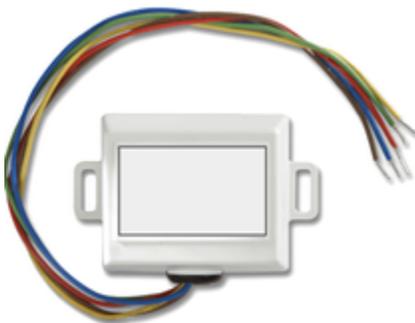
AutoTstat wiring

This step describes the wiring of the thermostat. Different terminals are used depending on the HVAC system type. The following table shows the different cabling options. The terminals support wires between 0.2 - 1mm² or 16 - 24AWG. Power supply voltage is 24V AC provided by the RTU, single or double transformer output is supported. Respective setting to be done on the dip switch on the backside of the AutoTstat, shown in the picture to the right.



R	24V AC Power supply
RC	
C	
W1	Heating stage 1
W2	Heating stage 2
O/B	Changeover valve (Heat Pump)
Y1	Cooling compressor stage 1
Y2	Cooling compressor stage 2
G	Fan
K	Add a wire with 4-5T module
H	Humidifier
DEH	Dehumidifier
T	External Temp Sensor
T	

Add a wire or wire saver accessories that need to be used when additional cables can't be run and an additional wire is needed to match the existing wiring of the unit with the thermostat. The following picture will show an add a wire device.

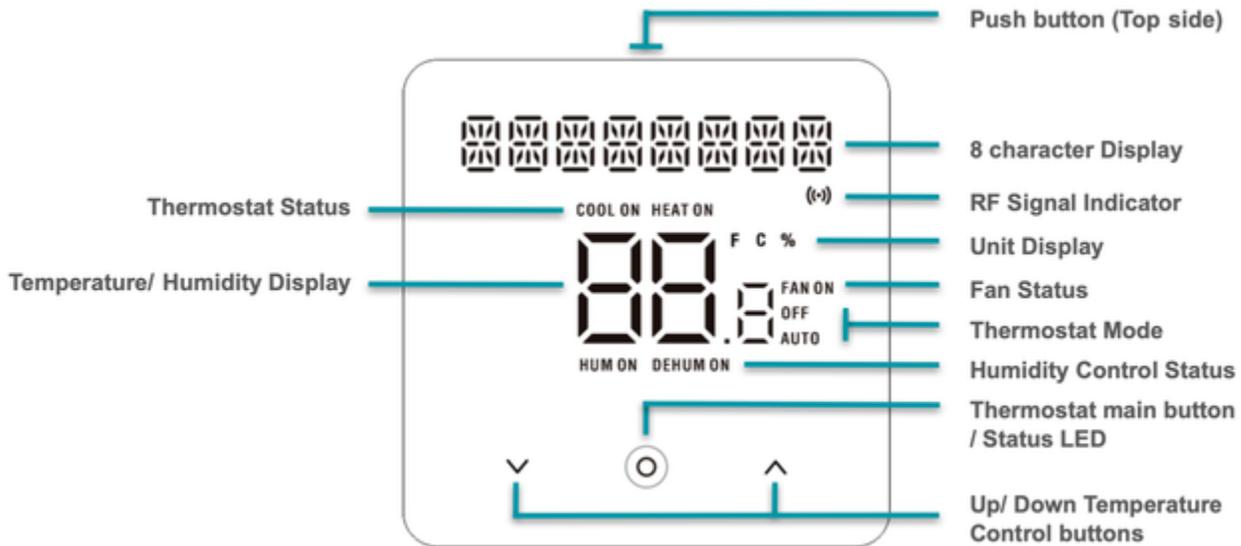


The Energybox AutoTstat supports all common HVAC system types. The wiring scheme needs to match with the system type. Supported combinations are shown in the table below.

Description	Wire scheme					
	G	Y1	Y2	W1	W2	O/B
Conventional cool only	●	●	○			
Conventional heat only	●			●	○	
Conventional heat & cool	●	●	○	●	○	
Heat pump cooling	●	●	○			
One-stage heat in heat hump (optional:Aux)	●	●	○			○
Two-stage heat in heat hump (optional:Aux)	●	●	●		○	○
One-stage heat & cool in heat hump (optional:Aux)	●	●				●
Two-stage heat & cool in heat hump (optional:Aux)	●	●	●	○	○	●

Initial start-up

After wiring has been done in accordance to the system type. The display unit is being installed on the back plate. The display will show all relevant information as follows.



Aside from the display functionality the AutoTstat provides 3+1 buttons to interact with the hvac system and make local adjustments including the desired temperature. The local adjustment is limited in terms of its adjustment range. A local adjustment will also be reverted to Standard operation procedure setting made in the Energybox platform after a given time.

Maintenance mode and factory reset

Thermostat maintenance mode

The AutoTstat is equipped with a maintenance mode to check the function of the different heating and cooling stages. In addition, the RF signal strength, the installed FW version and the setpoints for temperature and humidity are displayed every second. To enter the maintenance mode press and hold both arrow buttons simultaneously for 3 seconds.

To exit maintenance mode press and hold main button for 3 seconds. Alternatively the Thermostat will auto-revert after 15 minutes.

Reset to factory default settings

To reset the Thermostat to factory default settings press and hold the main button and right arrow button for 3 seconds while the thermostat is in OFF mode. The Display shows "RESETFAC" press main button 2 to confirm factory reset.

Installation, Setup and Configuration

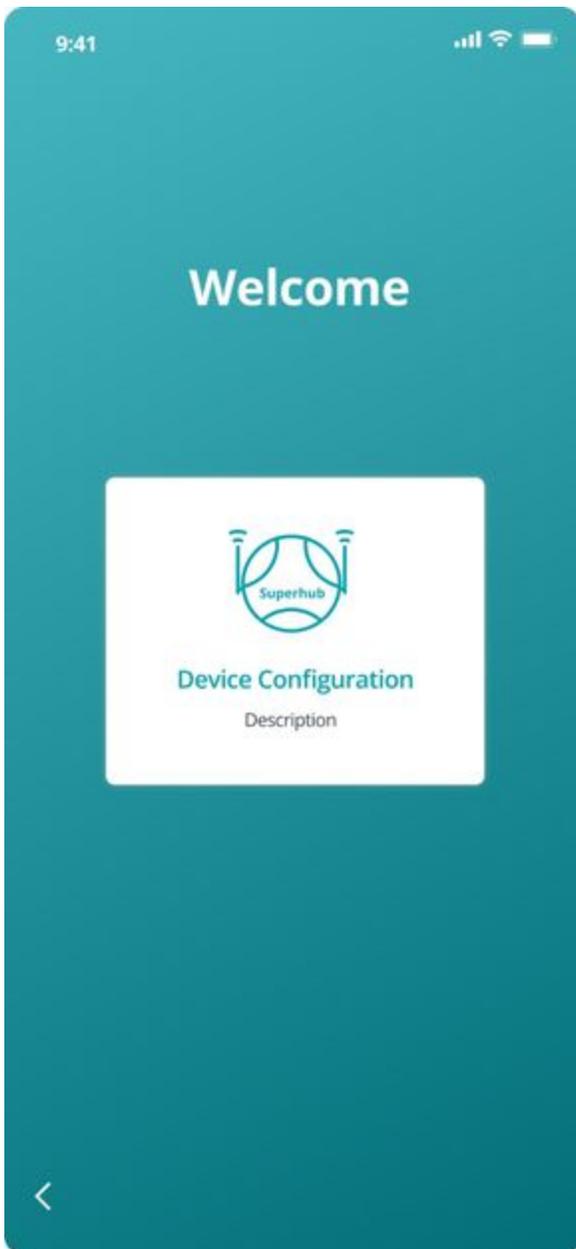
After the AutoTstat is mounted and connected to the RTU and the RF signal indicator is blinking the next step is to login to the SuperHub.

Login

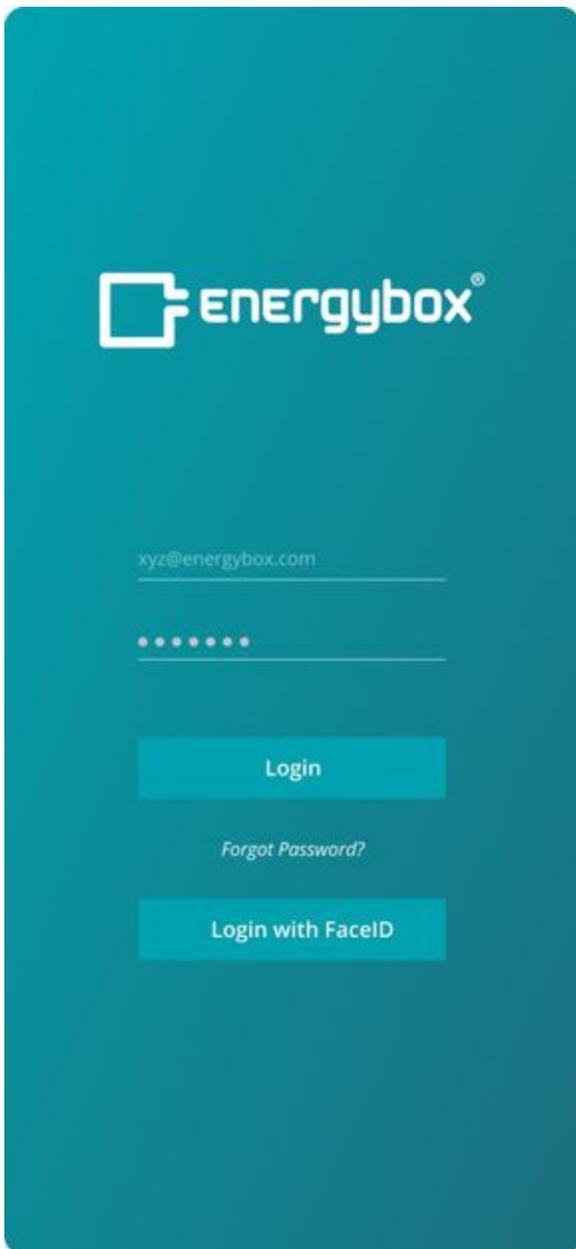
After the SimplySetup app has been installed to your smartphone please go ahead by starting it. On the first screen you are being asked for your login information. Please login with your Energybox One Platform username and password.

Connect to Superhub

After successful login the SuperHub device configuration screen shows up. After clicking device configuration the QR Code on the front of the SuperHub device needs to be scanned through the smartphone's camera.

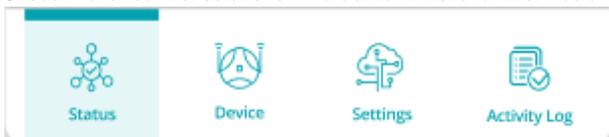






Connection and whitelisting AutoTstat

The SimplySetup app allows you to check for the actual status of the device and connected accessories including Thermostats, wireless dots and Sitecontroller control solutions. In order to whitelist a Thermostat please go ahead by clicking on the device button in the menu bar.



AutoTstat configuration in SimplySetup App

The Autostat is configured via the SuperHub user interface. To do this, the thermostat must be within RF range of the Superhub. The thermostat is listed in the Device section under unpaired devices from where it can be whitelisted. A corresponding connection is indicated by a white RF LED on the thermostat and Superhub.

Energybox

< Devices **Thermostat**

Whitelist [Edit](#)

Version	Tstat Mode	Status	Signal
1.1.635	71°F 40%	69°F 06:34:06 GMT	-45dB
1.1.635	68°F - 71°F 50%	69°F 06:34:06 GMT	-45dB

Unpaired List

UUID	Signal
00:0D:00:AE:06:61	-45dB
00:0D:00:AE:06:61	-45dB
00:0D:00:AE:06:61	-45dB

Status **Device** Settings Activity Log

AutoTstat Setup in Platform

After physical installation and configuration within the SimplySetup app have been done, the Thermostat needs to be set up within the EnergyBox Platform. In order to do that it is necessary to login first, then selecting devices from the menu on the left hand side of the screen. The device page will show up, the button on the top right allows you to install a new device. Please go ahead by clicking on Thermostat on the next popup selection.

Devices



Hub



SiteController



Thermostat

[Cancel](#)

The next screen is asking for relevant information including Device Name; UUID; Site; Space and Network Group. After entering it the setup can be finalized by clicking Add on the button right. The device will show up on the devices page.

Install Thermostat

Device Name *	<input type="text"/>
Description	<input type="text"/>
UUID *	<input type="text"/>
Remote Sensors *	<input type="text" value="0"/> 
Site *	 - Select -
Space *	 - Select -
Network Group *	 - Select -

*** Mandatory fields**

Please check for compatible models with your Energybox representative

[< Back](#)[Cancel](#)[Add](#)

Important Notes

Wrong RTU - The Display Unit and backplates are coded to each other and are not working with another pairing. "WRONGRTU" will be shown on the display.

Technical Data

Input Voltage	24V AC
Terminal capacity	0.2 - 1mm ² (24 - 16 AWG)
Temp setting range	4 - 35 (40~95 °F)
Measurement accuracy	0.5 (0.5)
Environment	Indoor use only
RF Frequency	915 Mhz
Dimensions	114mm x 114mm x 20mm (4.48 inches x 4.48 inches x 0.78 inches)
Approbation	FCC

FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.