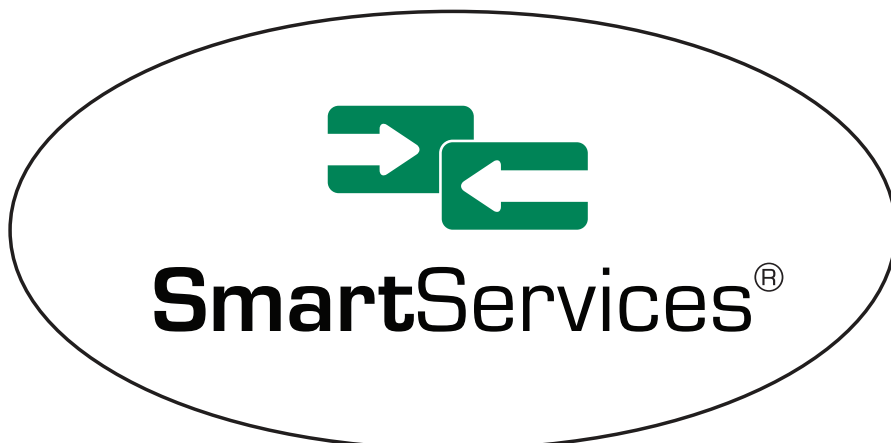




www.conairgroup.com

INSTALLATION GUIDE
UGS004-1021

SmartServices®



It's a good idea to record the Hub ID number(s) and the date you received it in the User Guide. Our service department uses this information, along with the manual number, to provide help for the specific equipment you installed.

Please keep this User Guide and all manuals, engineering prints, and parts lists together for documentation of your equipment.

Date: _____

Manual Number: UGS004-1021 _____

Hub ID Number: _____

Machine Type: _____

Machine Name: _____


Serial Number: _____

DISCLAIMER: Conair shall not be liable for errors contained in this User Guide or for incidental, consequential damages in connection with the furnishing, performance or use of this information. Conair makes no warranty of any kind with regard to this information, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.


Preparing for Installation

Installing your SmartServices Hub is easy, as long as you prepare by gathering all necessary tools, information and materials.

- ☐ SmartServices® Hub
- ☐ Included mounting bracket and double-sided tape
- ☐ Screwdriver and four (4) mounting screws appropriate for the surface you'll be mounting the Hub to
- ☐ WiFi enabled device (computer or tablet)
- ☐ SmartServices administrative username and password

 Log in now at smart.conairgroup.com to verify that your username and password will successfully work.

- ☐ List of machine information (model number, serial number - see included packet)
- ☐ Ethernet cable long enough to connect from internet to Hub

 **NOTE:** Ethernet Communication wires and cables (ie CAT 5 or CAT 6) shall be separated at least 50 mm (2 inches) from conductors of any electric, power, non-power limited fire alarm, or medium-power network-powered broadband communication circuits.

- ☐ Internet connection information from your IT department:

Static or dynamic: _____

Wired: _____

IP address: _____

Subnet mask: _____

Default gateway: _____

DNS: _____

Hub Mounting Installation

The SmartServices hub is easy to install if you plan the location and prepare the mounting area properly.

1. Make sure the mounting area provides:

- ❑ Access to an outlet within reach of the power cord of the hub. The outlet must have a grounded power source supplying the voltage and correct current (110V/1 phase/60 hz) for the hub. All electrical wiring should comply with your region's electrical codes.
- ❑ Minimum clearance for safe operation and maintenance. Clearance on sides should be 12 inches {30 cm} minimum.
- ❑ A mounting location that allows for screws to attach the bracket to the wall without being near electrical lines, material lines, communication lines, or any other obstructions.

2. Positioning the Wall-Mount Bracket on the wall

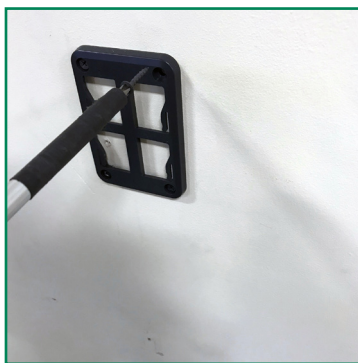
- ❑ Hold the bracket against the wall in the location you wish to mount it. Make sure that the bracket is level, and with the correct side facing out, and in the correct orientation. The bracket should be mounted as shown, with the triangular arrows pointing down, toward the floor.
- ❑ Mark the location of the holes with a pen. If mounting to drywall, you may be able to affix the bracket to the drywall using drywall screws without first drilling. If mounting to another surface, we recommend you drill the surface first, and use appropriate mounting hardware.
- ❑ Screw the bracket to the wall. Use caution to not over-tighten the screws, as it will damage the bracket.

3. Affixing the inside bracket to the Hub.

- ❑ Use the provided double-sided tape to affix the inside bracket to the back of the Hub. Position it as shown - centered, side-to-side, aligned with the bottom of the Hub, below the serial tag.

4. Mounting the Hub onto the Bracket

- ❑ Oriented with the arrows pointing down, insert the hub side of the mount into the wall side of the mount. Line up the tabs so that they are aligned with the top of the square holes through the wall mount bracket.
- ❑ Slide the hub down, until you hear and feel the two sections of the mounting bracket lock into place.



Part 1. Install the Hub



1. Connect Hub to 110 V power source.



2. **For wired connection:** Connect Hub to the internet using Ethernet cable.



3. Make sure the machine is connected via Ethernet cable to Hub.

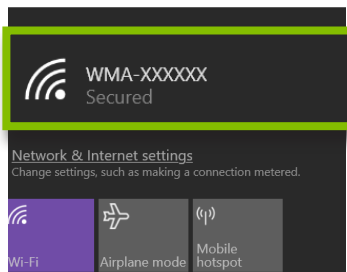
NOTE: Hub will take at least 7 minutes to perform self-diagnosis.

IMPORTANT: Do not press the reset button on the Hub or Expansion box unless instructed by Conair Service. Resetting the Expansion box or Hub will delete all factory-set configuration.

Part 2. Connecting to the Hub

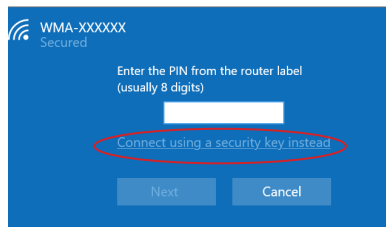
Connect using a computer or tablet by WiFi to the SmartServices Hub. Recommended browsers are Chrome and Safari.

1. Search available WiFi networks and select the network named **WMA-(XXXXXX)**. Each Hub has a unique network ID printed on the device. Example: WMA-15ccbe396



NOTE: If you see two WMA networks, make sure you choose the one with the Hub ID that you are installing.

2. Enter Hub WiFi password. You will see one of two screens depending on the system used. Press **Join** or **Connect**.



Windows users: When prompted to enter the PIN from the router label, click below where it says **connect using a security key instead** and enter "wmaHOTSpot". If prompted to allow access click yes.



Apple users: When prompted for a password type in "wmaHOTSpot".

3. Now that you are connected, open up a Chrome web browser and type "10.0.0.1:8080" into the address bar and press enter. This will bring you to the SmartServices Hub configuration page.

- At the SmartServices Hub configuration page select the desired type of connection to the internet. The choices will be wired or wireless.

Preferred method: Wired connection

Configure Hub's Internet Connection

Wired Wireless

Use DHCP to determine IP address
 View Ethernet Mac Address

IP Address
 required

Subnet Mask

Default Gateway

DNS

Connect

NOTE: If you do not choose to use DHCP, you will need your internet connection information from your IT department.

NOTE: If you are unsure about how you are supposed to connect to the internet or any of the details requested you should contact your IT department.

Wireless connection

To connect wirelessly please contact Conair for further instructions. (1.800.458.1960, press 1 for service)

Configure Hub's Internet Connection

Wired Wireless

Use DHCP to determine IP address
 View WiFi Mac Address

WiFi SSID
 required

WiFi Password
 leave blank for unprotected network

IP Address

Subnet Mask
 required

Default Gateway

DNS

Connect

- Click the **Connect** button. If you have a slow or intermittent connection you may need to try several times.

- You will now be on a verification page confirming your successful connection to the internet. (see diagram 3.1 on the next page).

Part 3. Connecting the Hub to SmartServices

If you do not see this page go back to Part 2 and try again.

1. Click the button that says **Associate Hub to Company**. This will add the device to your **Hub Management** page where you will be able to monitor and configure your Hubs.

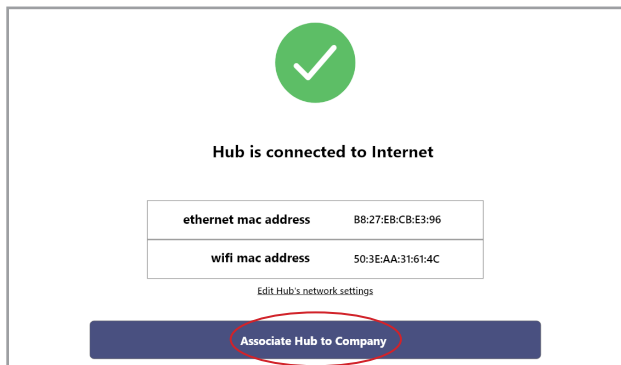
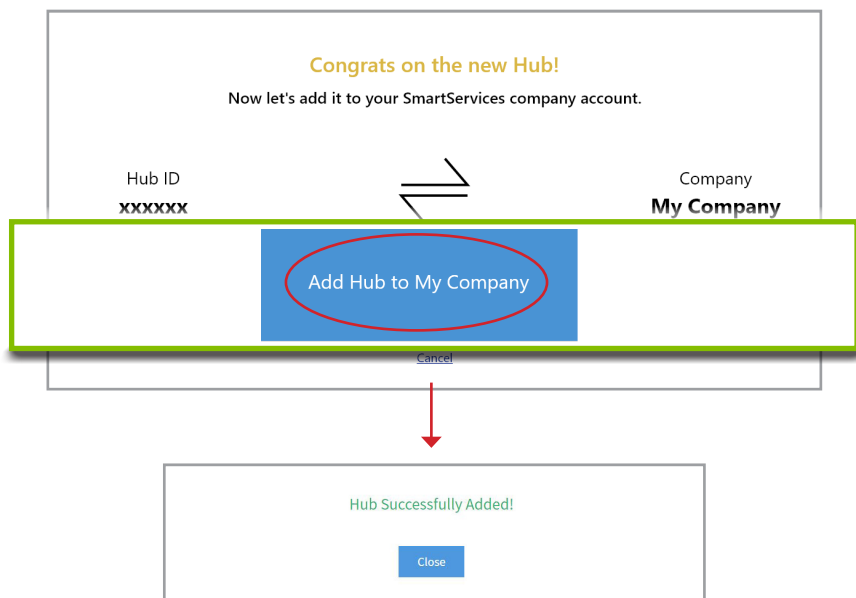


Diagram 3.1

2. If you did not save your SmartServices account login information on this device you will be asked to log in again.
3. Click the **Add Hub to [My Company]** button to add your new Hub to your SmartServices company account.



 **NOTE:** Click the close button.

4. Connect additional Hubs to your network at this time if required. Repeat part 2 and part 3 if you have any additional Hubs.
5. After connecting all of your Hubs, click the Wi-Fi network icon and select the Hub network you're currently connected to. Click the **Disconnect** button and reconnect to your regular WiFi network.

Part 4. Adding Machines to the Hub

1. Log on to the SmartServices portal (smart.conairgroup.com) if you haven't already, with your SmartServices username and password.
2. Navigate to the [Hub Management](#) page of the SmartServices portal.

- If you do not see the Hub management page, use the drop-down menu in the top right and choose Hub Management.

Status	Last Connection	Name	Hub ID	Connected Machines	IP Addresses
Showing 11 results					
Online	Online for 1 week	FLX	1e251689	0	192.168.5.1, 10.13.200.2
Offline	2 months ago	Trueblends	79105352	2	192.168.3.1, 10.13.200.1
Offline	5 months ago	Piconing	65159a13	0	192.168.1.88, 192.168.171.148
Offline	7 months ago	Plant 3-2	2e8f14e	0	10.1.42.2, 10.100.30.240
Online	Online for 43 hours	Cranberry	98c48f13	1	10.1.61.101, 129.183.0.165, 10.0.0.1

3. Click on your newly added Hub ID from your Hub Management page.
4. To add machines click on the [Add Machine](#) button in the lower right corner of the Hub information page.

NOTE: You will need to refer back to the Network Data page to fill out this form.

5. Select the Machine Type from the drop-down menu. *You may need to scroll down to find the machine.*
6. Enter the Machine's Name and Short Code (this can be any name you choose).
7. Enter the Serial Number.
8. Select the Group Association from the drop-down menu.
9. For Ethernet connection, set the IP address, Subnet, and Port needed for communications.
10. Click [Add Machine](#).

Ethernet connection

Add Machine Close

Machine Type
required

Machine Name
required

Short Code
required

Serial Number
required

Group Association
required

Note: Machine Network for Hub is not set up. You will be prompted to set up machine network after adding machine.

PLC Modbus IP Address
required

Subnet Mask
required

PLC Modbus Port
required

Add Machine

Serial connection, RS485

Add Machine Close

Machine Name
required

Short Code
required

Serial Number
required

Machine Type
Thermolator TW-P

Parity Bit
parity none

Stop Bits
stopbits one

BaudRate
115200

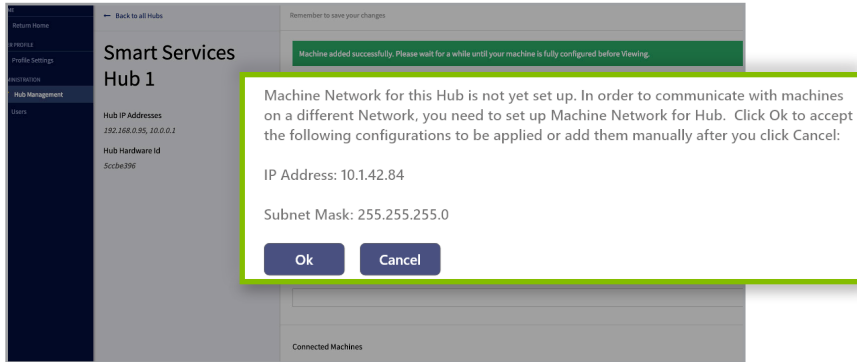
Node #
1

Add Machine

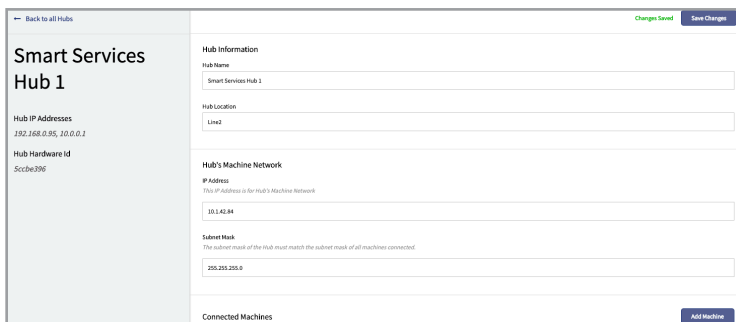
NOTE: You can verify this information at the HMI of the piece of equipment you're connecting to SmartServices. For example, on a TrueBlend blender control, you will go to "System" and "Network" in the Setup screen to verify the correct IP Address, Subnet, and Port. This information should be what you add to the connection settings here in the Hub Management page.

Part 5. Setting up the Hub's Machine Network

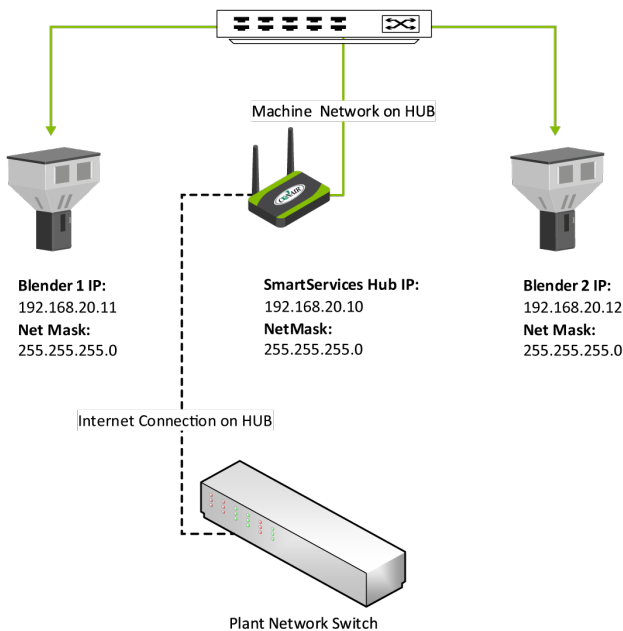
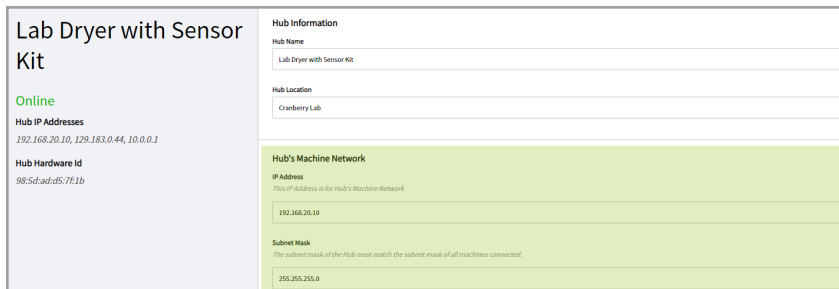
If machines are connected to the Hub's Machine network, you will need to set up a unique IP address on this network. If it is connected to the machines through the other network we've already set up, you can skip to step 4.



1. Select **Hub Management** from the hamburger menu on the SmartServices Portal and click on the correct Hub located under Hub ID.



2. Input the desired IP Address and Subnet Mask into their fields.



This is a unique IP address assigned to the HUB for the HUB's machine network. If this address and subnet do not automatically populate, choose an IP address and subnet that will be totally UNIQUE for this HUB's machine connection network.

Example (installing HUB and blender): You set the HUB machine network to 192.168.20.10, and subnet at 255.255.255.0. When you "Add Machine", set the blender as a unique IP address 192.168.20.5. The next blender you add can be 192.168.20.6.

Always make sure that the HUB machine network address is unique, and any machine talking to the HUB has unique IP addresses as well, but are on the same network with only the last digit being unique for each device.

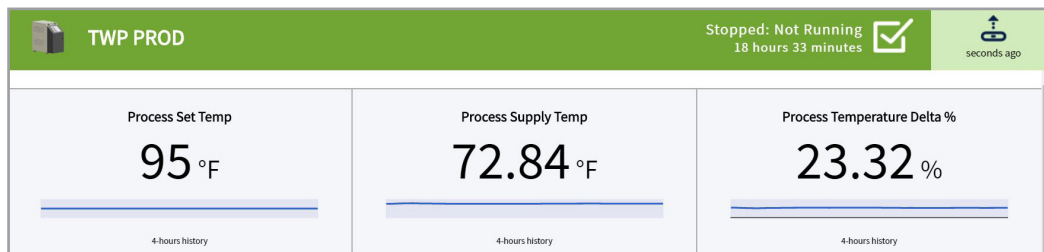
3. Press the **Save Changes** button in the top right corner of the screen.

4. Verify everything is correct by clicking **View** next to that specific machine.

NOTE: If you receive an Error message stating that the machine does not belong to the group, try refreshing the page. It may take a few minutes, and refreshing the page several times before the new settings take effect and the machine is recognized. If after 5 minutes you're still getting the error, it is likely that the software version of your HMI needs updated. Please contact Conair for more assistance.

You've completed the installation of SmartServices!

NOTE: If everything is correct you will see a screen similar to this.



5. To add more machines go back and repeat part 4.

NOTE: If you try to set up a machine without setting up the Machine Network, SmartServices will ask to set up the network for you with a valid IP address and Subnet.

NOTE: If the machines you are connecting to are on the same network as the Hub's internet access then the Hub's Machine Network will not be used.

Troubleshooting

Problem	Possible Cause	Solution
The top bar is gray and says "No route to host."	IP addresses and/or subnets are incorrect. Ethernet cable is not connected.	Correct IP addresses and/or subnets and submit. Connect Ethernet cable.
The top bar is gray and the Hub shows that it is offline.	Hub may be restarting from configuration updates. Hub is unplugged. Machine IP is incorrect.	Wait 15 seconds and verify Hub comes online. Verify power to Hub. Verify machine IP address at machine HMI. Correct IP address in connected machine settings by pressing the edit button next to that machine.
Data displayed does not make sense.	The Incorrect machine type was selected when adding the machine.	Verify the machine type is correct on the Hub Information page. Contact Conair for further assistance.
No historical data is shown.	The machine has not been running long enough to collect historical data.	Allow machine to run for 30 minutes for data to accumulate. Refresh data screen by navigating away and back to the screen.

SmartServices Expansion box instructions


One of the advantages of SmartServices is the ability to add external sensors to existing equipment. Currently, external sensor kits can be purchased for both Conair and other brand machinery. Conair PD Pumps, LDP Pumps, RG Pumps, PowerFill systems, and Thermolators have available sensor kits that include all hardware and sensors necessary and are designed to work directly with SmartServices.

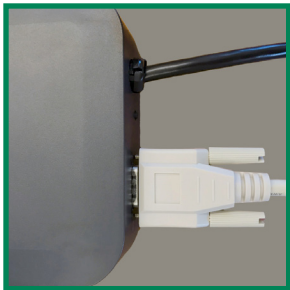
Adding these sensor kits requires the installation of a SmartServices Expansion box for connection to the sensors. The Expansion box then connects directly to your Hub.

Follow these instructions if you are adding the Expansion box to your SmartServices network. If you have not added any external sensor kits, you will not have an included Expansion box and these instructions will not apply to your application.

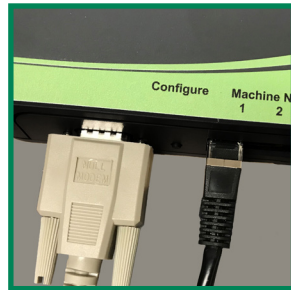
1. Connecting a SmartServices Expansion box to the SmartServices Hub.

- ❑ Disconnect power from the Hub by unplugging it.
- ❑ Connect the Expansion box to the Hub using the RS-485 cable that came with the Expansion box.
- ❑ Plug in the Expansion box, followed by the Hub.
- ❑ The Expansion box will automatically turn on and connect to the Hub.

 **NOTE:** The Expansion box has no communication ability through Ethernet or wireless. It only communicates through the RS-485 cable to the SmartServices Hub.



RS485 cable connected to the Expansion box.




RS485 cable connected to the Hub.


2. Connecting sensors to the Expansion box.

- ❑ Connect the sensors to the Expansion box per the instructions that came with your sensor kit, and the drawings provided. The sensor connections are predefined by sensor type, and terminated into the Expansion box into specific locations using quick-connect plugs.

3. Enabling the Expansion box.

- ❑ Verify that all sensor connections were made to the Expansion box following the instructions that came with your SmartServices sensor kit.
- ❑ Log in to the SmartServices portal and complete the setup for the attached machine as you would any other. See page 7 for help with adding machines. Expansion kit machine choices will appear in the drop-down menu for machine types.

 **IMPORTANT:** The Dip switch settings are factory set to work with your system. Do not make any adjustments. Adjusting these settings will cause the sensors to stop working, and your SmartServices system to stop communicating with the proper equipment.

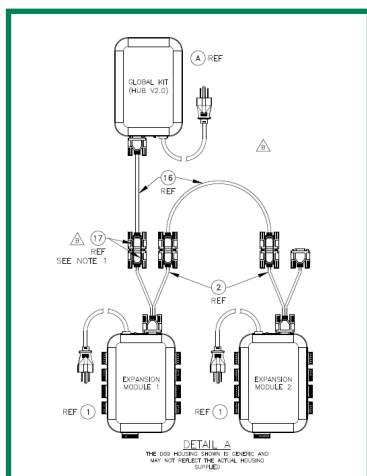
 **IMPORTANT:** Do not press the reset button on the Hub or Expansion box unless instructed by Conair Service. Resetting the Expansion box or Hub will delete all factory-set configuration.

Multiple Expansion boxes installation

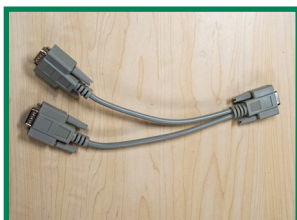
Using Multiple Expansion boxes from one SmartServices Hub.

Up to 7 (seven) SmartServices Expansion boxes can be connected to each SmartServices Hub. This allows you to attach up to seven sensor kits to a single Hub. The seven attached sensor kits can be all the same type, or a mix of different equipment sensor kits. For example, 7 Thermolators, or 3 pumps and 3 Thermolators and 1 dryer, etc.

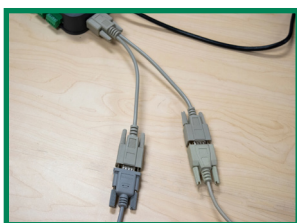
1. Verify that all Expansion boxes, and the Hub are disconnected from power.
2. Refer to the SmartServices Expansion box drawings that came with your kit(s). This is drawing number 126018XXXX.



3. Connect the pigtail Y-connector (part #267-319-03-01) to the first Expansion box, closest to the Hub.

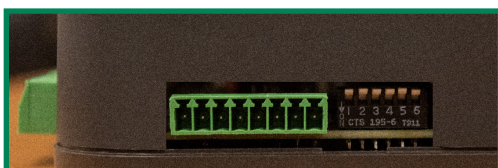


4. Connect one end of the Y connector to a RS485 cable going back to the Hub.
5. Connect the other end of the Y connector to a RS485 cable going the next Expansion box.

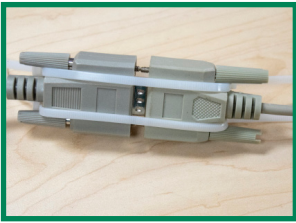


NOTE: If you are continuing the chain, you will need to connect a Y connector to the next Expansion box also.

6. Set the DIP switch on the first Expansion box as directed on the wiring diagram. Each Expansion box connected to the Hub will have a unique setting.



4. Continue this process for each Expansion box (up to seven maximum) that you will be connecting to the Hub. The last Expansion box in the chain will need to use the DIP switch setting that indicates it is the last Expansion box in the group. Refer to the wiring diagram for more information.
5. Secure all end-to-end RS485 connections using the zip ties included with your pigtail wiring kit. Cut off the loose ends of the zip ties.



6. Verify that all sensor connections are still securely attached to each Expansion box, and that the Expansion boxes and Hub are secured in their locations.
7. Reconnect power first to the Hub, and then to each Expansion box in the system. Make sure you reconnect power to the connected Expansion boxes in a sequence from closest (1st connection to the Hub) to furthest (last terminating connection). This will allow the system to recognize each Expansion box in order.
8. Use the instructions in this guide to connect all the sensors and kits to the Hub and add them to your SmarServices dashboard. Contact Conair with any questions.

Resetting the SmartServices Hub or Expansion box

IMPORTANT: This process should only be completed as directed by Conair Service. Resetting the device will wipe all factory settings.

1. Upon power up of the unit, the reset button is active for five seconds.
2. Within the first five seconds of power to the unit, press and hold the reset button.
3. Hold the reset button for 5-10 seconds.
4. Watch for the individual LED closest to the corner of the unit to turn on solid for about 0.5 second, then flash rapidly.
5. Once the light is flashing rapidly, release the reset button.

The unit has now been wiped and is ready for programming.

