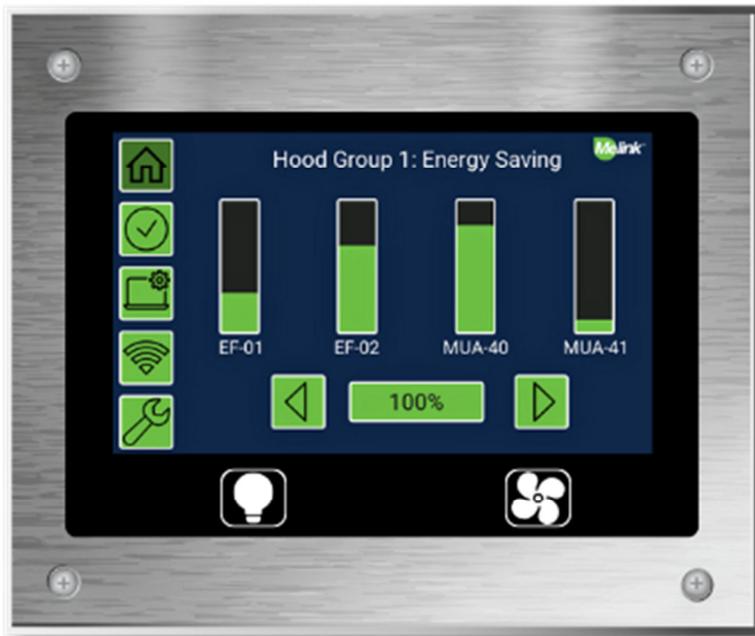


# INSTALLATION MANUAL



•Specifications are subject to change as updates are completed•

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## Tools & Materials Required

### Tools Required

- Drill and Drill Bits (Cobalt is best for stainless steel) - bit sizes: 1/8" & 1/4"
- Hole Cutter or Punch for Stainless Steel with cutter sizes: 1-1/2" & 1-1/8"
- Adjustable Pliers and Adjustable Wrench
- Screwdrivers - Straight & Phillips, Large and Small
- Wire Cutter and Wire Stripper
- Measuring Tape and Level
- Step Ladder

### Materials Required

- Suitable fasteners for mounting the System Controller and Variable Frequency Drive (VFD)
  - hollow cinder block (3/16" toggle bolts)
  - concrete or filled cinder block (lead anchors 1/2" dia. with 1/4" x 1-14" lag screws)
  - drywall (3/16" toggle bolts)
  - plywood (#8 X 1-1/4" wood screws)
  - metal back-plate (#8 X 1-1/4" sheet metal screws)
- Conduit and wire for wiring the System Controller and VFDs

**Note:** All high voltage wiring to be completed by trained service personnel. (Local code may require a licensed electrician.)

### System Controller Models

- There are two models of System Controllers. Installation is identical for both models.

Model	Wi-Fi Enabled?	PCIe Expansion Capability?	HDMI Output Capability?
System Controller (SC4)	No	No	No
System Controller Plus (SC4-P)	Yes	Yes	Yes



STEP

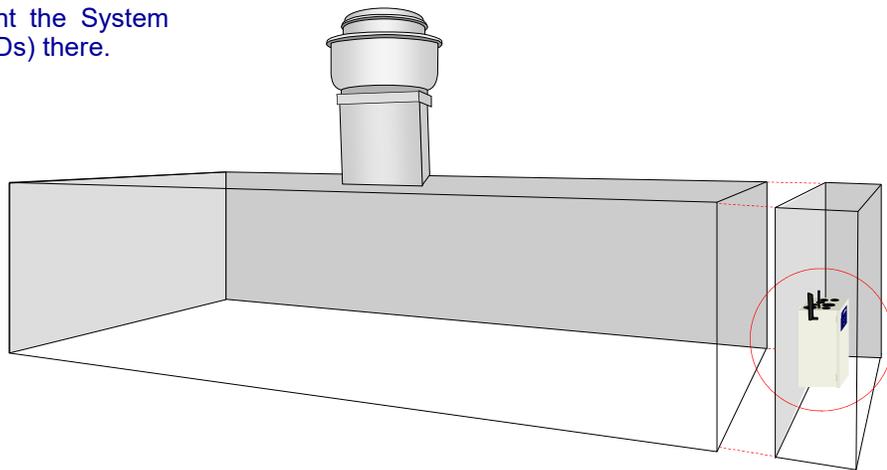
1

## Install System Controller

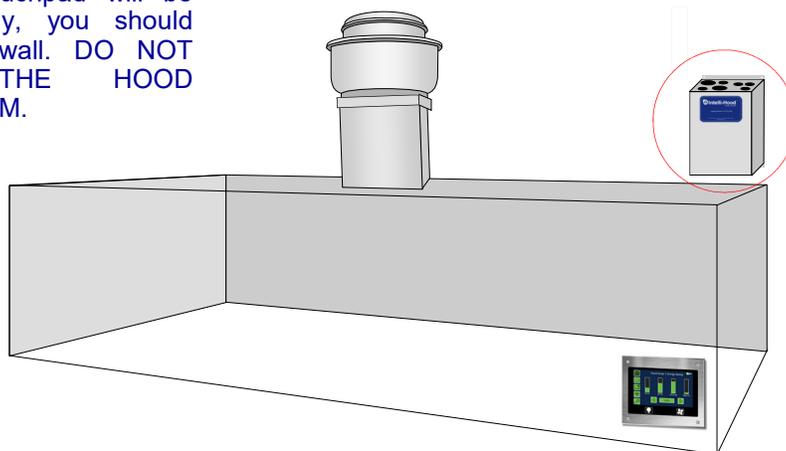
A

### Select System Controller Location

**For new construction**, the hood manufacturer typically provides a utility cabinet in which to mount the System Controller. If the hood has a utility cabinet with extra space, mount the System Controller (and VFDs) there.



**For retrofits**, the System Controller is typically mounted above the hood. Select a location that is easily accessible and close to where the Touchpad will be mounted. Ideally, you should secure it to a wall. **DO NOT PENETRATE THE HOOD EXHAUST PLENUM.**





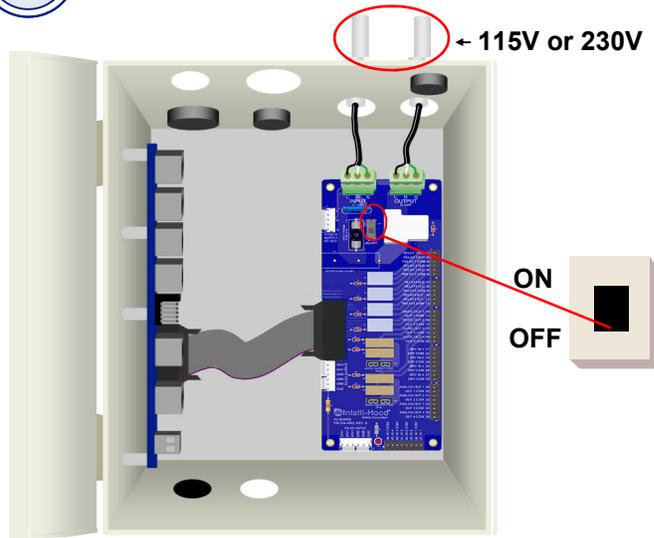
STEP

1

## Install System Controller

**B**

### Turn Off Power Switch



**Turn OFF the System Controller power switch before wiring. Also turn off the breaker feeding this circuit.**

**C**

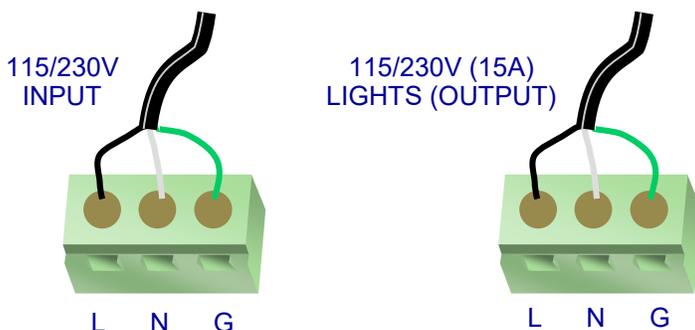
### Wire System Controller



For both New Construction & Retrofits, wire the System Controller using the hood light circuit. The circuit must be 115V to 230V, at 50-60Hz. Maximum input current is 17A.

**D**

### Wire Connections Inside System Controller



Wire gauge per NEC; allowable size range is 16AWG to 12AWG.

**New Construction & Retrofits:**  
Main Input Power  
from Hood Light Circuit  
115-230 VAC @ 50/60Hz; 17A Max

**New Construction:**  
Outgoing Power to Hood Lights  
Output Voltage Matches Input  
15 Amps max

#### Retrofits:

It is not required to use these output terminals if there are other provisions in place to control the hood lights. Note that output voltage will be the same as the input voltage.

**Tungston Output Rating:**  
8A @ 120V  
5.4A @ 240V

**STEP****2**

## Install Variable Frequency Drive

**A**

### Verify Variable Frequency Drive Wiring

**For new construction**, the Intelli-Hood includes a Variable Frequency Drive or VFD for each kitchen exhaust and make-up air fan. This type of starter is for use with 3-phase motors only. It not only turns the fans on and off, but also varies the speed of the motors by varying the output frequency and voltage. Therefore, you do not need a conventional magnetic motor starter with our system. **Caution:** If you have a tempered make-up air unit, then the control circuit for the heating system must be fed by a separate power source and NOT from the VFD! The output of the VFD must be wired to the motor ONLY and NOT to a transformer or any part of a control circuit!

If there is a make-up air unit, then the VFD for this unit typically must be interlocked with the fire suppression switch. This is typically done by using a shunt-trip breaker to power the System Controller so it loses power upon fire system activation. Follow the instructions for the appropriate VFD (reference page 22) to adjust the control wiring so that it will shut down when the System Controller loses power. **Caution:** With variable frequency drives, there must be a separate conduit run for the output of each VFD (inputs may be run together if desired). If this is not done, there is a strong probability of problems due to line interference and inaccurate motor control.

**For retrofits**, the only difference between new construction and retrofits is that on retrofits you will already typically have conventional magnetic motor starters installed. In most cases, it is recommended that you install the VFD on the output side of the existing starters. This will enable the cooks/chefs to use the existing hood fan (and light) switch(es) and not have to change their habits. This will also allow you to keep the existing circuit intact between the magnetic starter for the make-up air unit and the fire suppression micro-switch. **Caution:** If there is an adjustable overload on the existing starter, it is strongly recommended that the overload be removed as these devices often prematurely trip when a VFD is on the circuit (even if the drive is on the load side).



**All wiring must comply with the National Electric Code (NEC and local code requirements.**



STEP

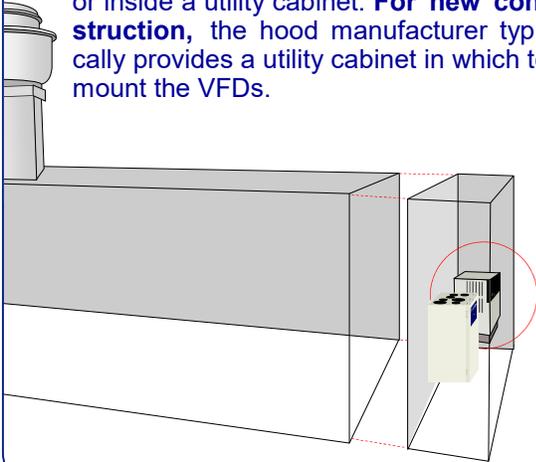
2

## Install Variable Frequency Drive

**B**

### Select VFD Location

For retrofits, each VFD is typically mounted on the output side of the existing motor starter, which is often located in an electrical room, above the hoods, or inside a utility cabinet. For new construction, the hood manufacturer typically provides a utility cabinet in which to mount the VFDs.



**C**

### Check VFD Location



The location must be relatively free of dirt, grease, and water. The ambient temperature must be between +14 degrees F and +122 degrees F. There should be 5" of clearance on the top and bottom and 1" on the sides for adequate ventilation/cooling.

**D**

### Mount VFD

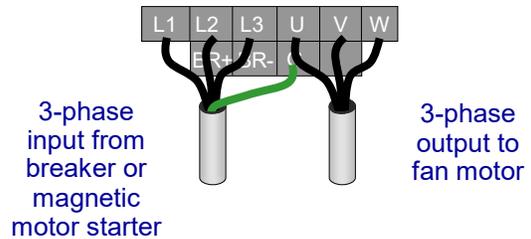


Mount each VFD with appropriate fasteners.

Then install separate conduit for the input and output power wiring to prevent electrical interference between the conductors.

**E**

### Wire VFD



Remove the VFD top cover and connect the line voltage wiring to the VFD input power terminal block as shown above. Then connect the output power from the terminal block to the respective fan motor on the roof. The ground wire must be a minimum of 14 AWG and as short as possible. **The output wiring for each VFD MUST be in a separate conduit run.**

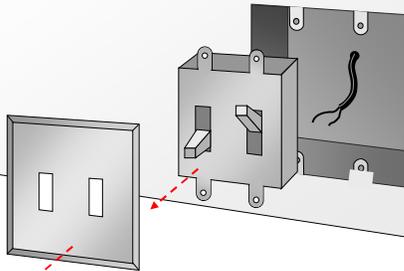


STEP

3

## Install Touchpad

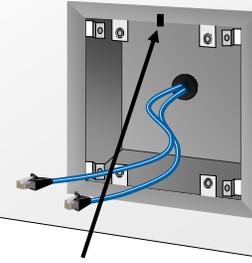
### A Remove Existing Switches



**Before removing the switch cover plate, turn off the circuit breaker.**

For retrofits, if you want to replace the existing fan and light switch with our Touchpad, remove these switches from the junction box. Then remove the existing wires to make room for the Touchpad Cable.

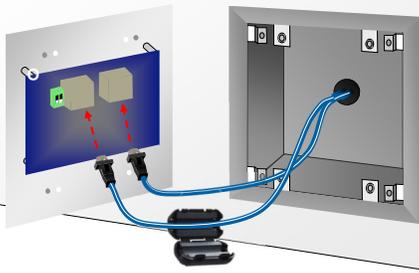
### B Run Touchpad Cable



Notch-side up

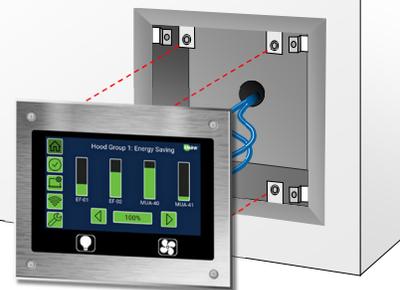
Run the Touchpad Cable inside the existing conduit and leave approximately 5 inches of slack inside the junction box. Mount the Touchpad Bezel to the j-box notch-side up. Note using the longer 6-32 screws, and that if the Touchpad is to be centered on a wall or fixture, the j-box must be offset 0.3" to the right..

### C Plug In Cable, Install Ferrite Core



Plug the connector into the receptacle on the back of the Touchpad. Then clamp the ferrite core onto the cable between the Touchpad and System Controller.

### D Mount Touchpad



Mount the Touchpad to the junction box and secure the Touchpad cover plate by screwing in the short 6-32 screws. Complete by applying silicone caulk to the outside edges to prevent liquid intrusion behind the cover plate.

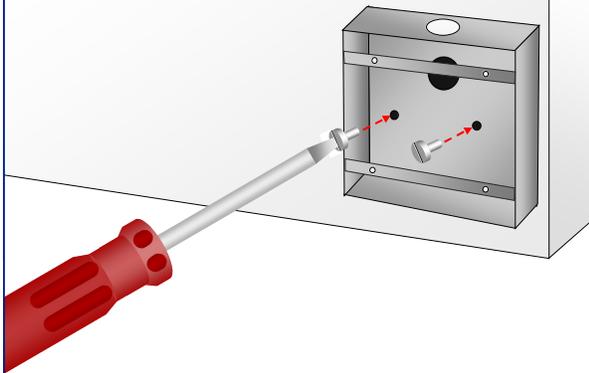


ALTERNATE

3

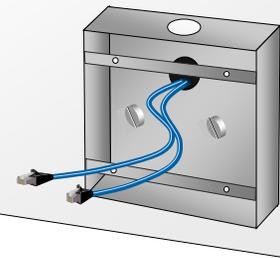
## Install Touchpad

### A Install Surface Mount Box



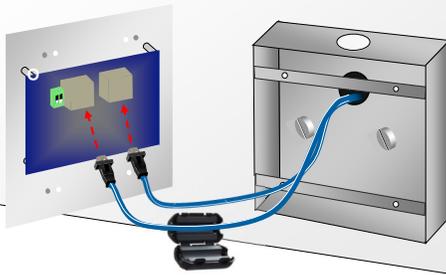
Install the Surface Mount box by attaching screws through the holes provided inside the box. If possible to bring cable in through the wall behind the box, first drill a 1" hole in the wall. If not, install 3/4" conduit stubbed up above the ceiling for the cable run.

### B Run Touchpad Cable



Run the Touchpad Cable inside the 3/4" conduit or through the back of the box and leave approximately 5 inches of slack inside the junction box. You will connect the other end of the Cable to the System Controller in Step 9. If another device will be installed downstream of the Touchpad, run two cables.

### C Plug In Cable, Install Ferrite Core



Plug the connector into the receptacle on the back of the Touchpad. Then clamp the ferrite core onto the cable between the Touchpad and System Controller.

### D Mount Touchpad



Attach the Touchpad to the Surface Mount box using the four 6-32 machine screws.



STEP

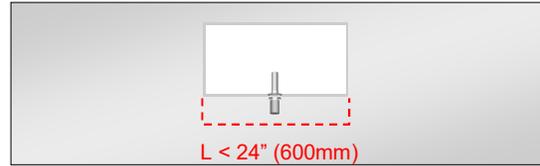
4

## Install Exhaust Temperature Sensor

A

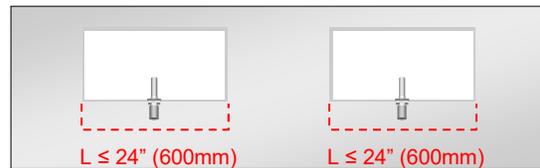
### Determine Number of Sensors

Install one (1) Temperature Sensor per exhaust duct, if the length of the duct is less than 24". In most cases this will mean one Temperature Sensor per hood.



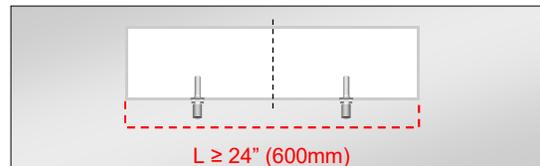
Hood 1 (Top View)

In some cases, this will mean two Temperature Sensors per hood.



Hood 2 (Top View)

If the length of the duct is more than 24", then install two Temperature Sensors in order to obtain a better average reading.

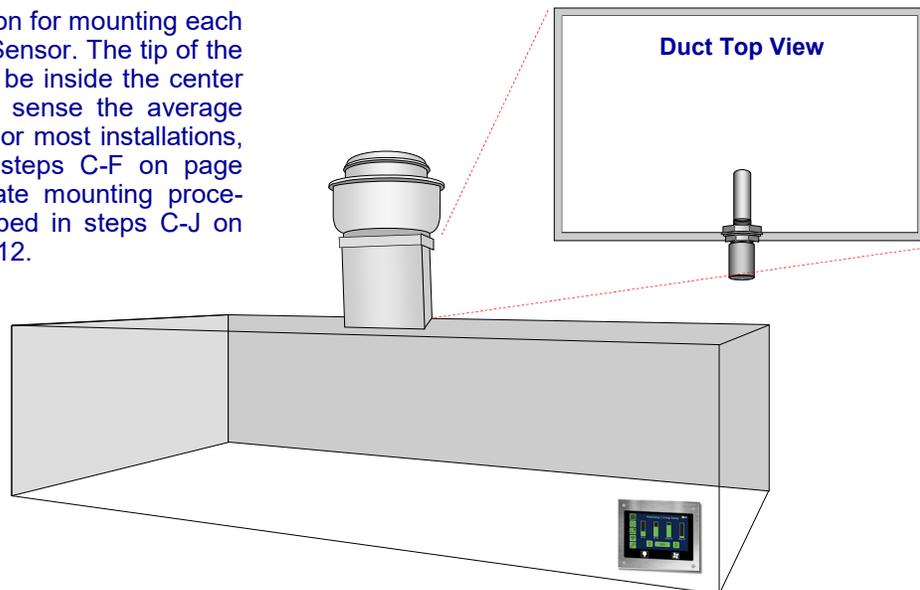


Hood 3 (Top View)

B

### Select Location for Mounting Sensor

Select a location for mounting each Temperature Sensor. The tip of the sensor should be inside the center of the duct to sense the average temperature. For most installations, proceed with steps C-F on page 10. An alternate mounting procedure is described in steps C-J on pages 11 and 12.





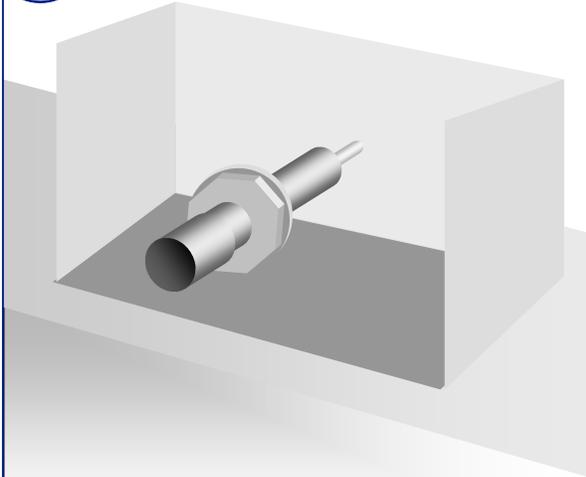
STEP

4

## Install Exhaust Temperature Sensor

C

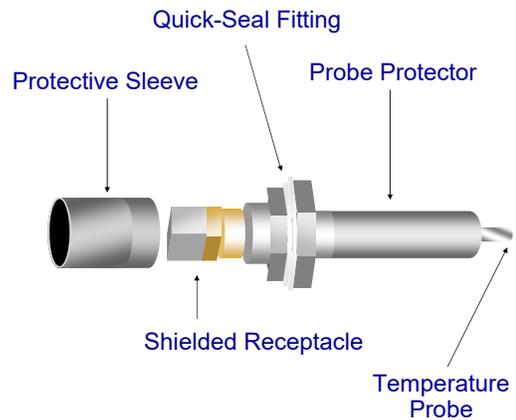
### Select Location on Duct



Each Temperature Sensor should be located as closely to the top of the hood as possible for easy access and cleaning.

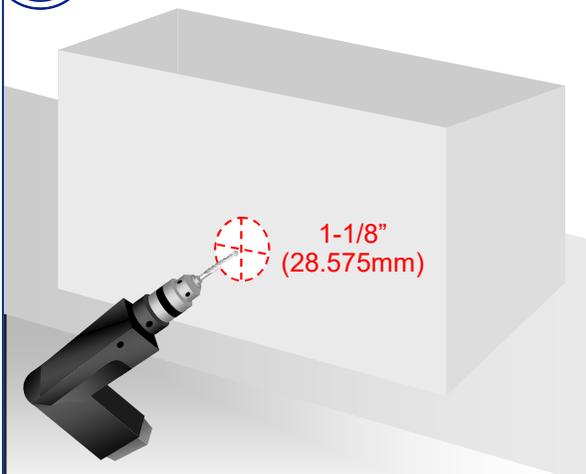
D

### Side View of Sensor



E

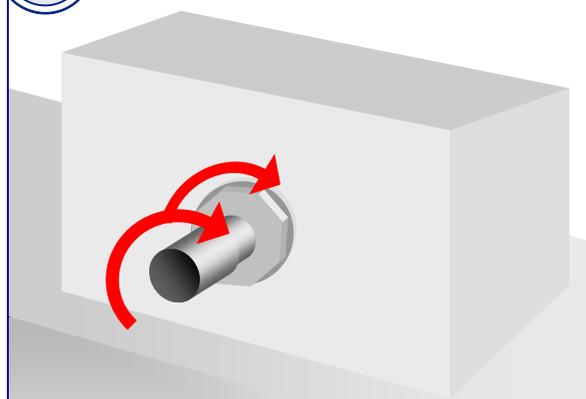
### Drill Hole in Duct



Drill or punch a 1-1/8" (28.575mm) diameter hole at the proper location for each Temperature Sensor.

F

### Mount Sensor



Mount each Temperature Sensor from the inside of the duct. Insert the lock washer and tighten the nut from the outside of the duct, then re-attach protective sleeve and strain relief.



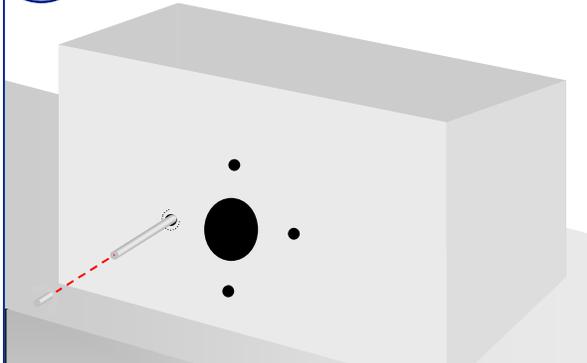
ALTERNATE

4

## Install Exhaust Temperature Sensor

A

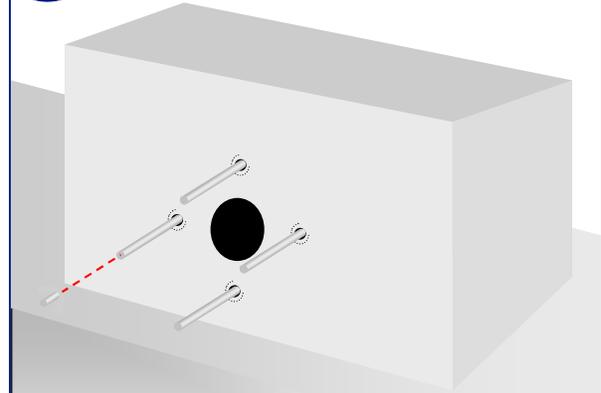
### Insert Studs



By reaching into the 2-1/4" hole, insert the stud into the 3/16" hole from inside the duct so that the threaded end is protruding outward. Tighten the wing nut onto the stud until its self-clenching base is securely wedged into the hole. Repeat this step for the other studs.

B

### Tighten Studs

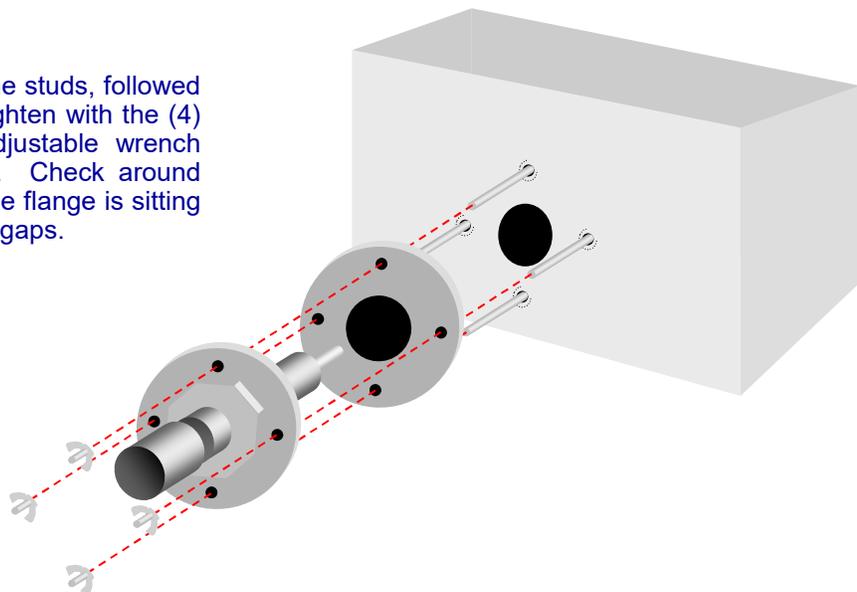


Remove wing nut from each stud. Check to be sure that all the studs are securely wedged into each hold. If any feel loose, re-tighten the wing nut onto the stud using a wrench. Remove all remaining wing nuts.

C

### Mount Sensor

Place the gasket over the studs, followed by the flange fitting. Tighten with the (4) wing nuts using an adjustable wrench until the unit is secure. Check around the seal to make sure the flange is sitting flush to the duct with no gaps.





STEP

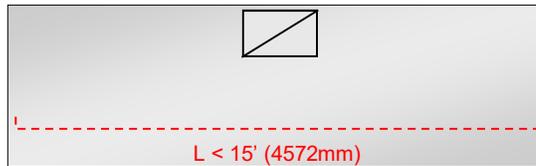
5

## Install Canopy Sensor

A

### Determine Number of Sensors

Install one (1) Temperature Sensor per hood, if the length of the hood is less than 15'. In most cases this will mean one Temperature Sensor per hood.



Hood 1 (Top View)

In some cases, this will mean two Temperature Sensors per hood.

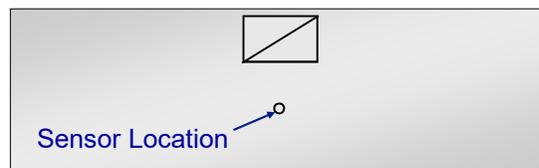


Hood 2 (Top View)

B

### Select Location for Mounting Sensor

Select a location for mounting each Temperature Sensor. For hoods <15', the sensor should be close to the center of the canopy. Be careful to avoid installing the sensor next to incandescent light bulbs as they can adversely affect accuracy of the sensor. Proceed with steps C-F on page 14.



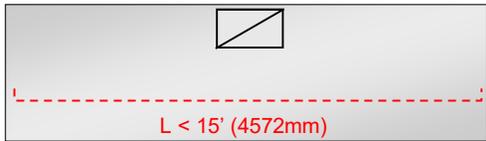


STEP

5

## Install Canopy Sensor

### C Select Location on Roof of Hood

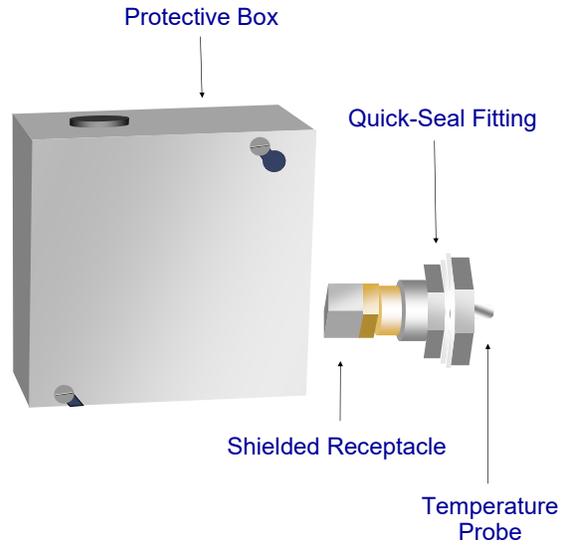


Hood 1 (Top View)

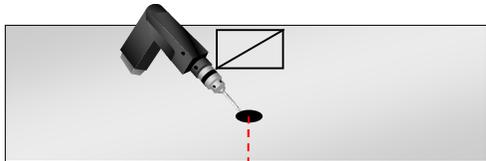


Hood 2 (Top View)

### D Side View of Sensor



### E Drill Hole in Roof of Hood



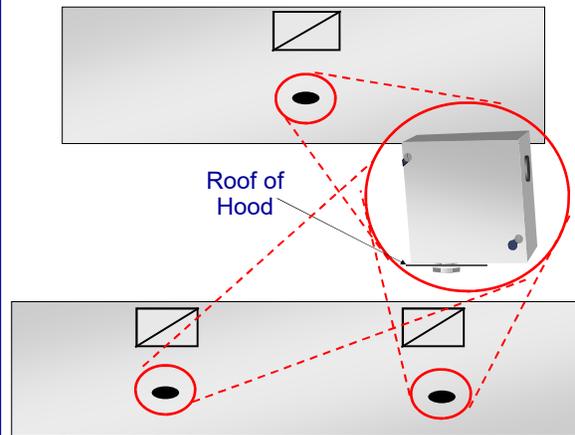
1-1/8"  
(28.575mm)



1-1/8"  
(28.575mm)

1-1/8"  
(28.575mm)

### F Mount Sensor





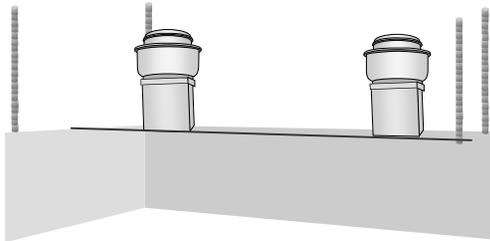
STEP

6

## Install Hood Controllers

**A**

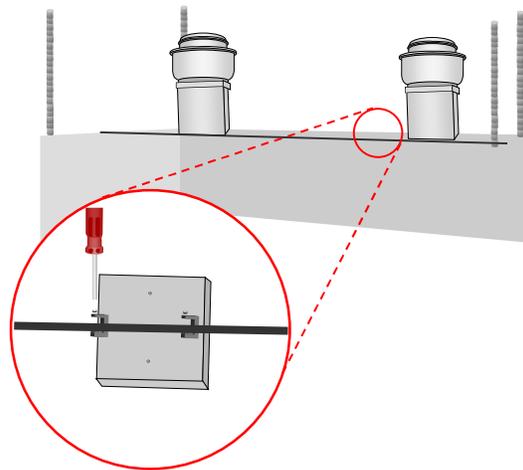
### Select Hood Controller Location



Select a location from the following four options for mounting each Hood Controller. The best way will vary based on conditions at each hood.

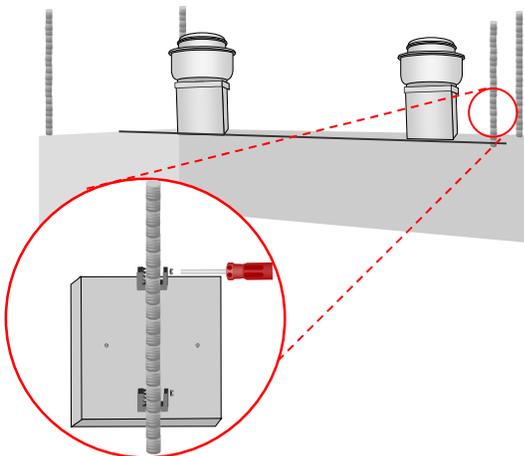
**B**

### Option 1: Secure Hood Controller to Standing Seam



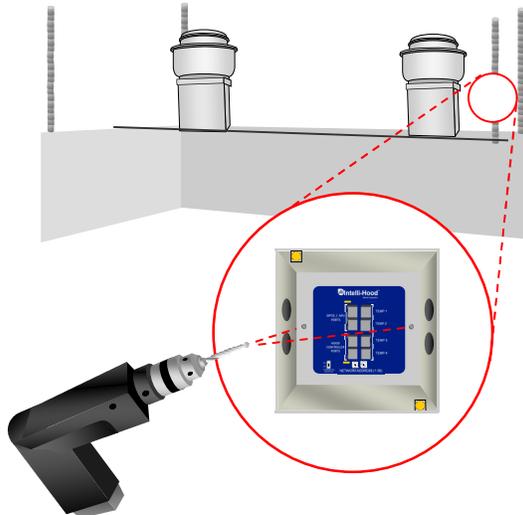
**C**

### Option 2: Secure Hood Controller to All-Thread



**D**

### Option 3: Secure Hood Controller By Bolting to Wall (Remove Clamps)





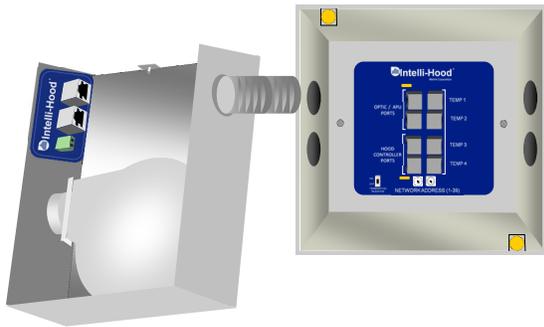
STEP

6

## Install Hood Controllers

E

**Option 4: Secure Hood Controller with Pass-Thru Nipple to APU**



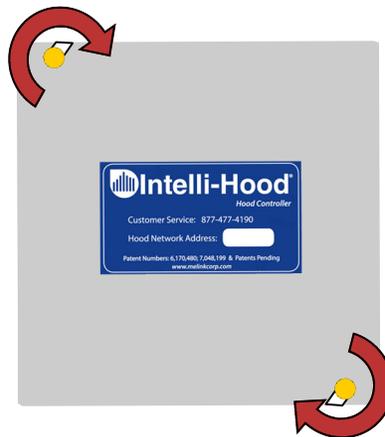
F

**Re-Attach Lid of Hood Controller**



G

**Re-Attach Lid of Hood Controller**





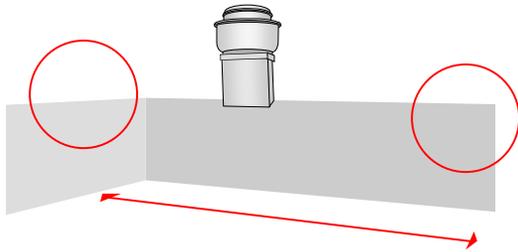
STEP

7

## Install Optic Sensors

A

### Check Hood

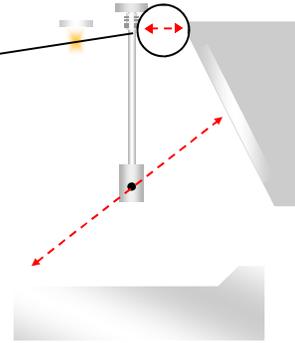


Make sure there are no obstructions at least 10" (254mm) from where you need to penetrate the top of the hood. Also, make sure the location will not cause the Optic Sensor beam to be obstructed by anything, such as fire suppression piping.

B

### Select Sensor Locations

Approx. 3" is typical.

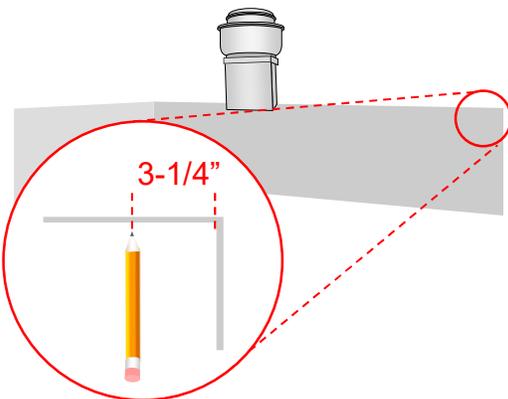


To determine where to install the Optic Sensors, imagine a virtual line between the front

of the cooking surface and the middle of the hood filters. The Optic Sensors should be mounted along that virtual line inside the ends of the hood. (This is typically about 3" from where the filter bank meets the top of the hood.) Also, the Optic Sensors must be mounted directly across from each other.

C

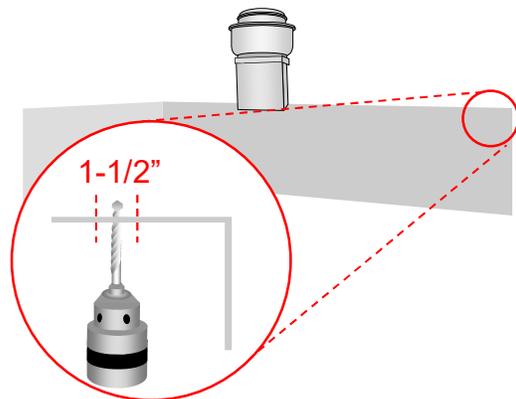
### Mark Hole Locations



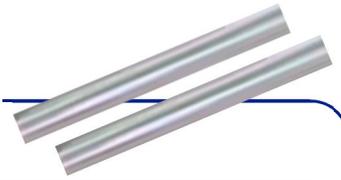
The hole locations need to be centered 3-1/4" (83 mm) from the **inside** ends of the hood. Drill a small pilot hole to mark these exact locations.

D

### Drill Holes in Hood



Then drill or punch a 1-1/2" (38mm) hole at these same locations.



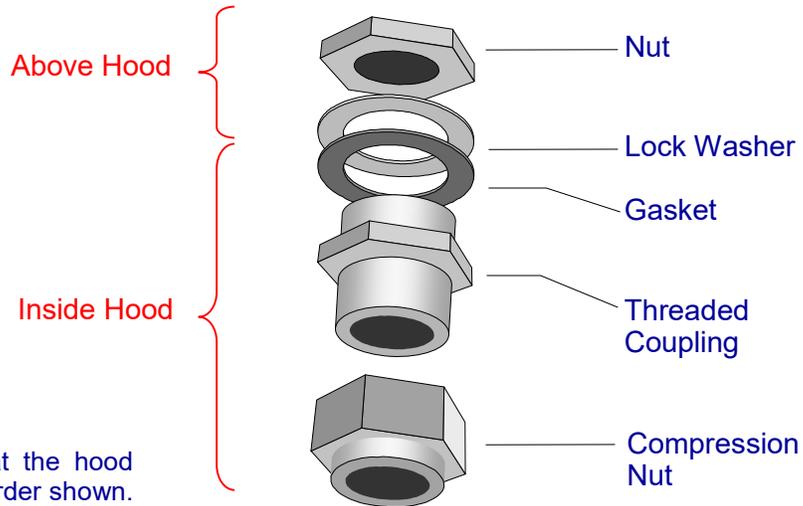
STEP

7

## Install Optic Sensors

E

### Install Fittings

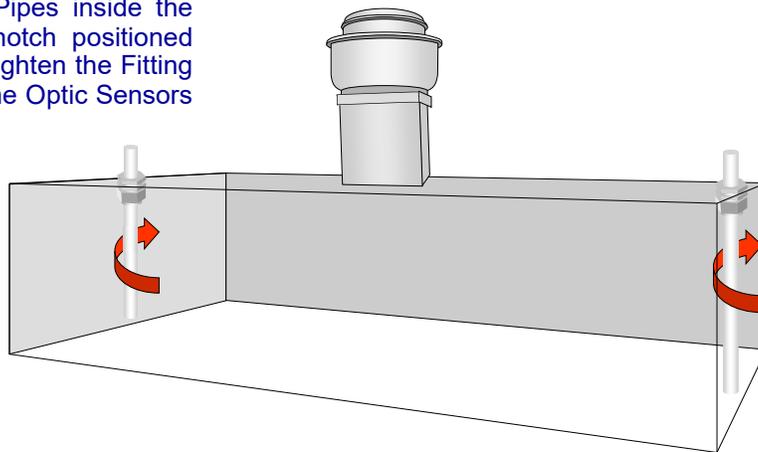


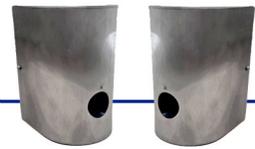
Install the Fittings at the hood penetrations in the order shown. Provided UL Listed fittings must be used.

F

### Install Purge Pipes

Insert the Purge Pipes inside the Fittings with the notch positioned above the hood. Tighten the Fitting temporarily, until the Optic Sensors are mounted.





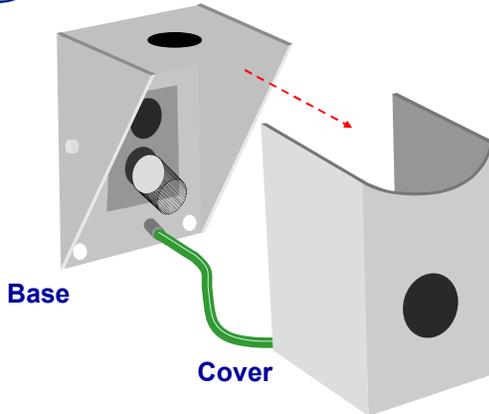
STEP

7

## Install Optic Sensors (Optic Enclosures)

G

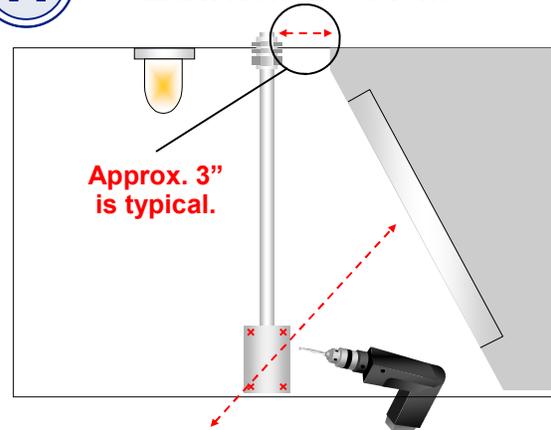
### Disengage Optic Sensors



Disengage the cover from the base on each Optic Sensor. One has a circuit board labeled 'Emitter', and the other is labeled 'Receiver'.

H

### Mark Hole Locations

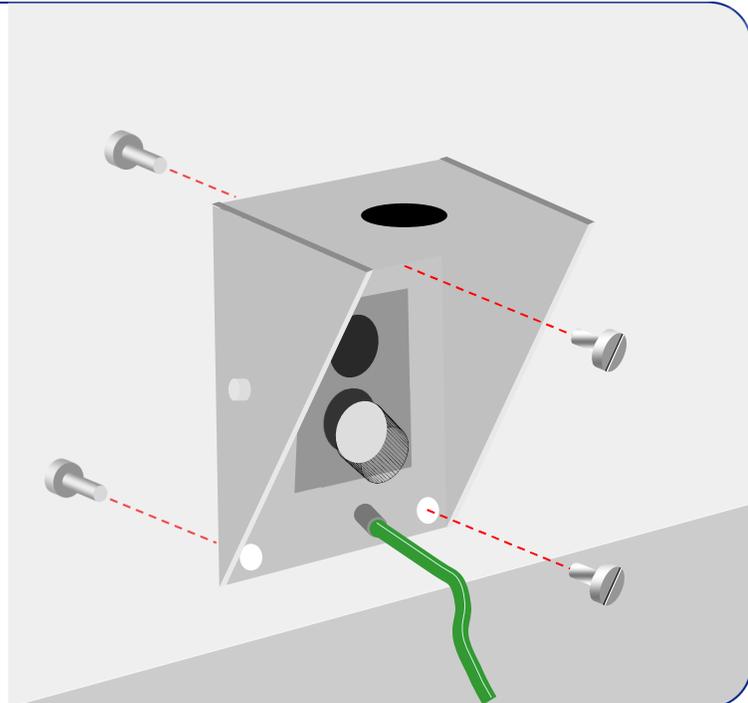


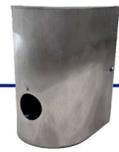
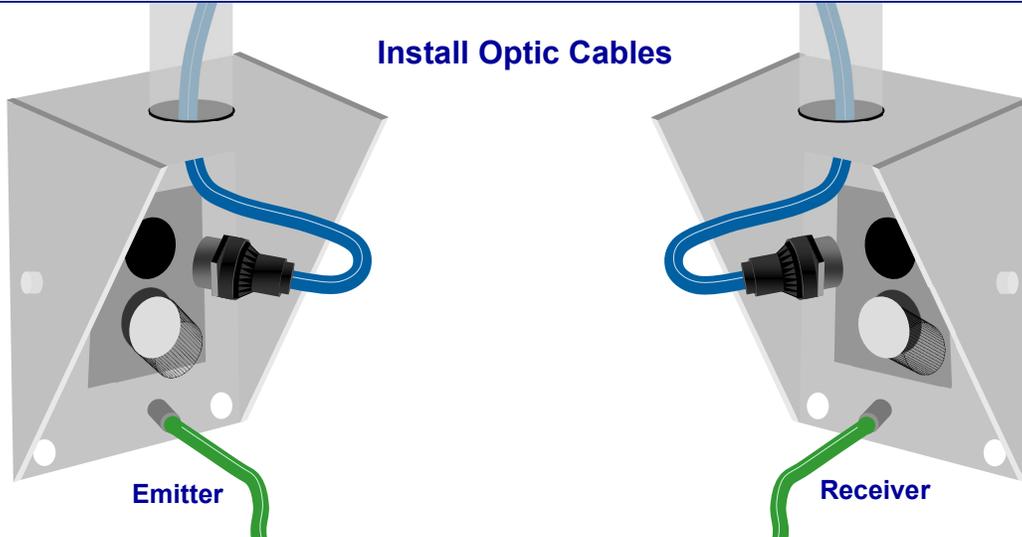
Use the base of each Optic Sensor as a template to mark the location for two mounting holes. Be sure to locate the Optic Sensor in the virtual line mentioned in step 5-B. Drill 3/16" holes.

J

### Mount Optic Sensor Base

Mount the base with two stainless steel screws. The screws can be located inside or outside of the hood, depending upon the location of the hood. If the hood is located against a wall, then self-tapping screws from the inside must be used. If the hood is not located against a wall, then use the machine screws, washers and nuts provided.

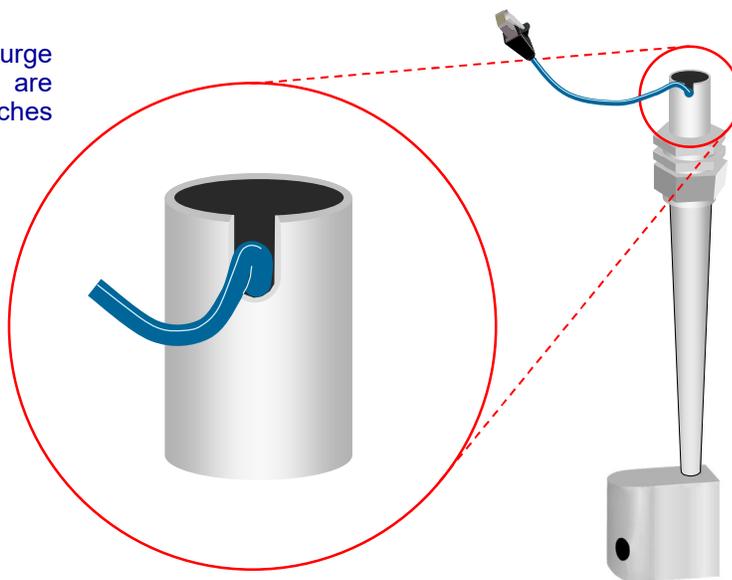


**STEP****7****Install Optic Sensors****K****Install Optic Cables**

Remove the Optic Cables from the box. Insert the end of one cable with the small anti-snag boot up through the purge pipe from the optic housing with the Emitter Board. Plug in the cable end with the round connector and push any excess slack up the purge pipe. Mount the cover onto the base. Repeat with Receiver Board.

**L****Run Cable Up Purge Pipes**

Run the cables up each Purge Pipe and verify that they are located inside the notches before installing the APUs.





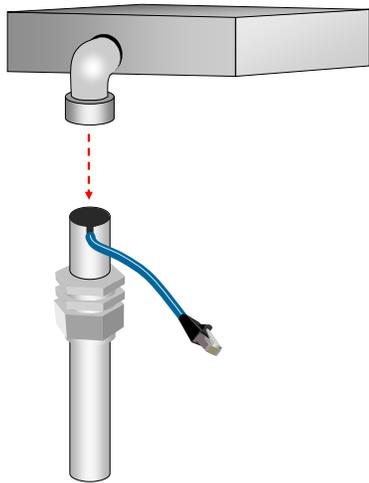
STEP

8

## Install Air Purge Units

A

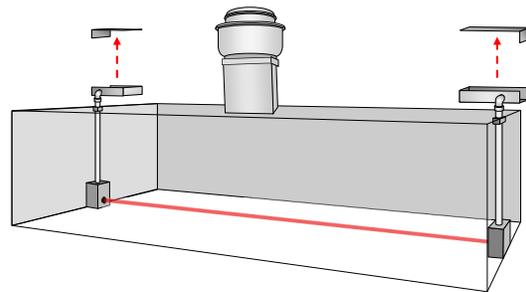
Attach APU to Purge Pipe



Attach an APU to each Purge Pipe and tighten the compression fitting.

B

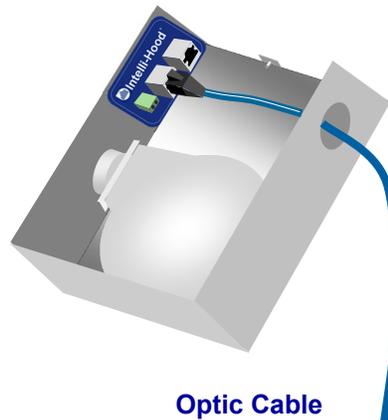
Remove APU lids



Remove the lids from each APU box to prepare for step 7.

C

Plug In Optic Cables



Plug the Optic Cables into either receptacle on the header board inside each APU.



STEP

9

## Install Cables (Variable Frequency Drive)

A

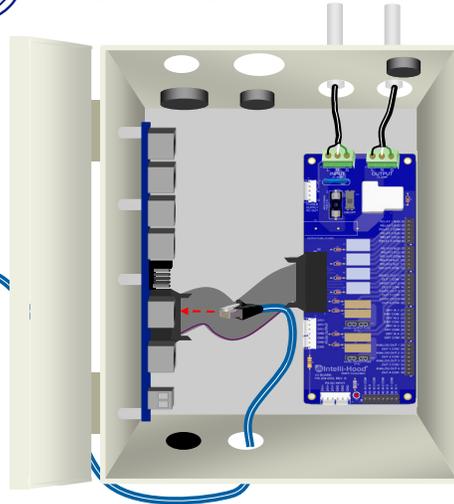
Plug Cable Into VFD



Remove a cable from its package and plug one end into the receptacle on the bottom of one VFD.

B

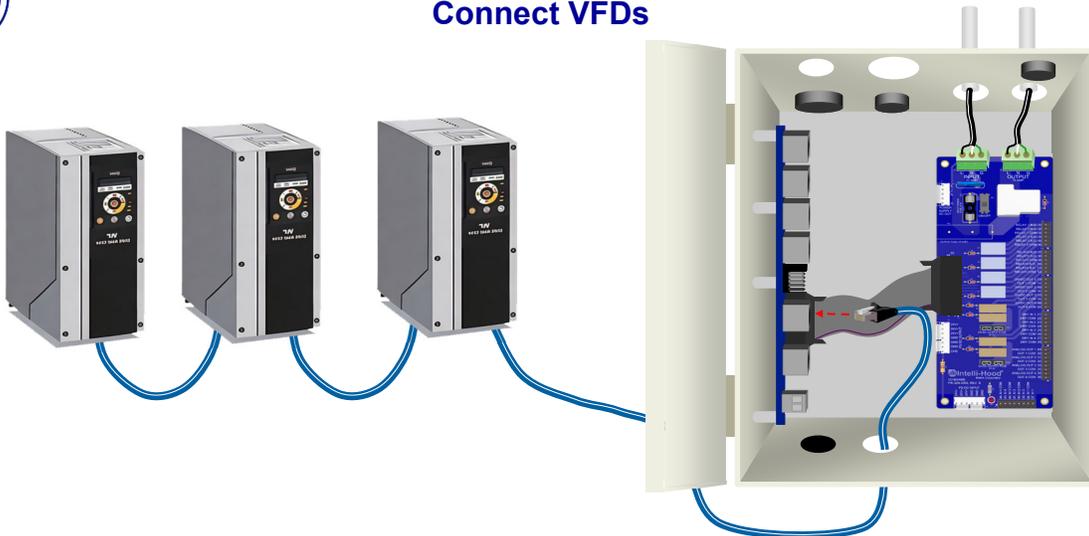
Plug Into System Controller



Then plug the other end of the cable into the receptacle marked 'VFD' on the side of the System Controller.

C

Connect VFDs



If you have multiple VFDs, plug the remaining VFDs to one another with additional cables, keeping only one VFD plugged to the System Controller.



STEP

9

## Install Cables (Touchpad)

D

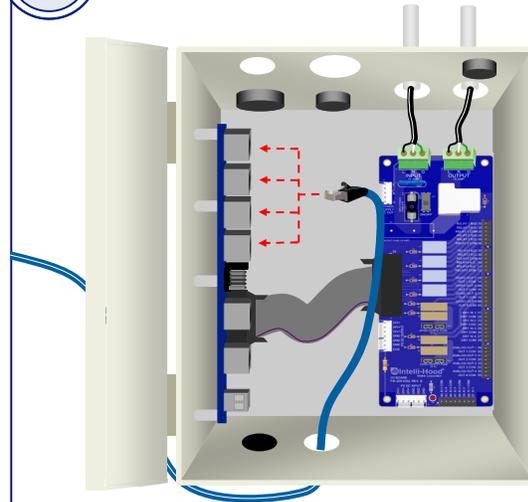
Find Touchpad Cable



Inside the Utility Cabinet, take the Touchpad Cable already connected on one end ...

E

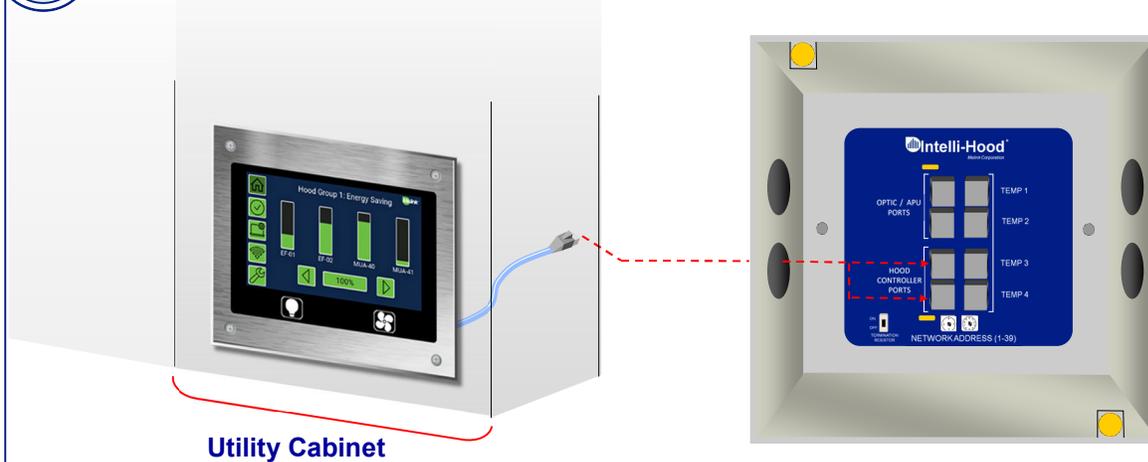
Plug Into System Controller



...and run it to the System Controller on the other side of the cabinet.

F

Plug Touchpad Cable into Hood Controller





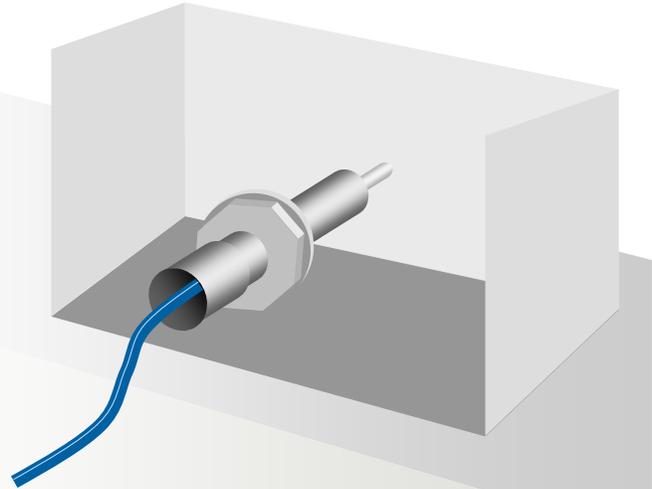
STEP

9

## Install Cables (Temperature Sensor)

G

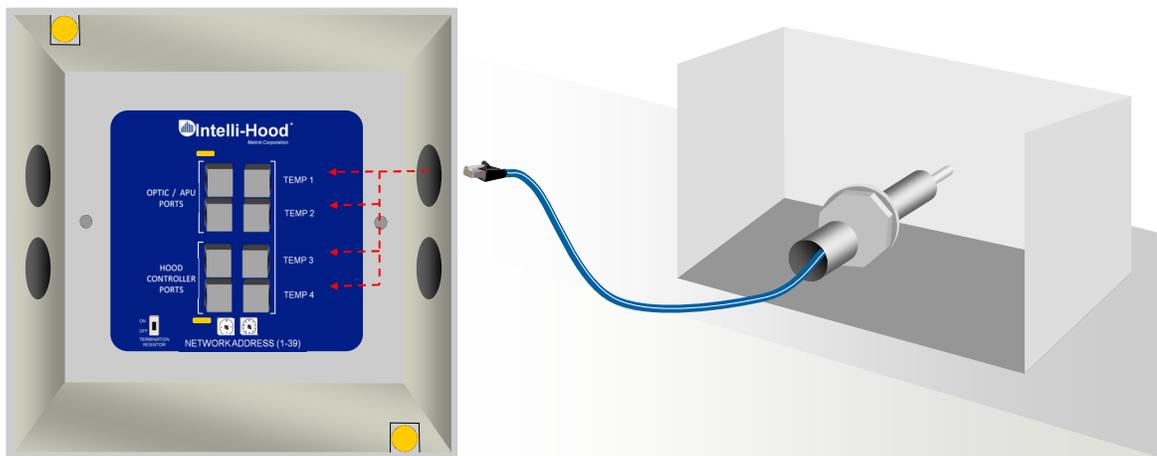
### Plug Cable into Temperature Sensor



Remove the Temperature Cable from its package. Connect one end to the Temperature Sensor receptacle.

H

### Plug Into Hood Controller



Connect the other end of the cable into a Temp port on the Hood Controller. Make sure to note which port each sensor is plugged into as they will be assigned via programming.



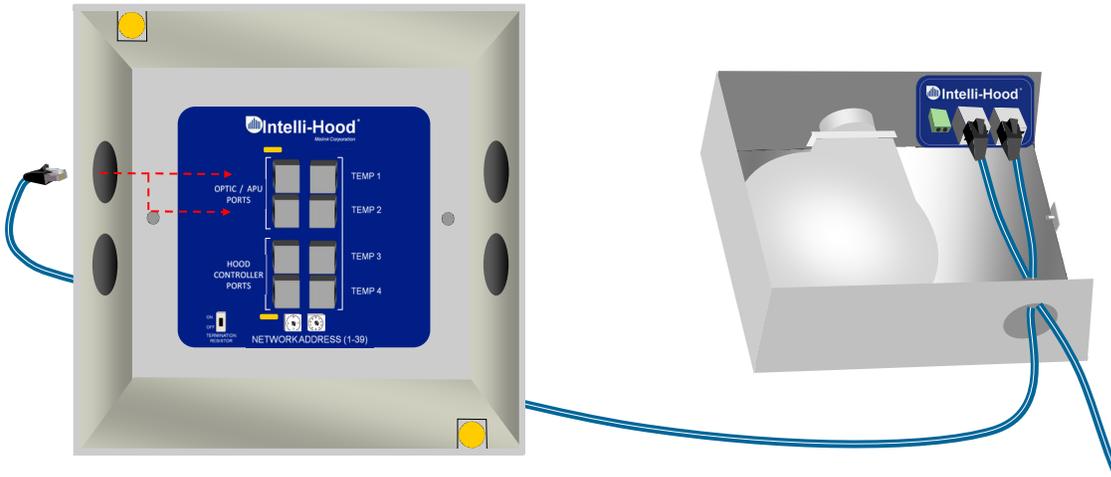
STEP

9

## Install Cables (Hood Controller)

J

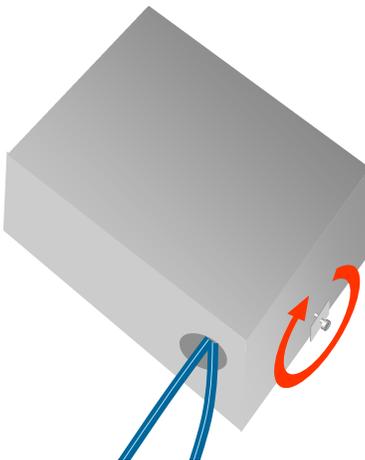
### Plug Into Hood Controller



When optics are being used, plug a cable in between each APU box and the Optic /APU Ports on the Hood Controller...

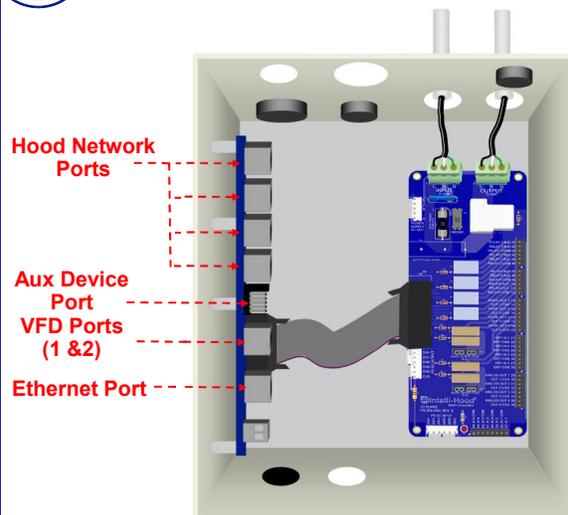
K

### Secure APU Lid



...then replace the lid on the APU and tighten the thumbscrew. Repeat steps A-D for remaining hoods.

L





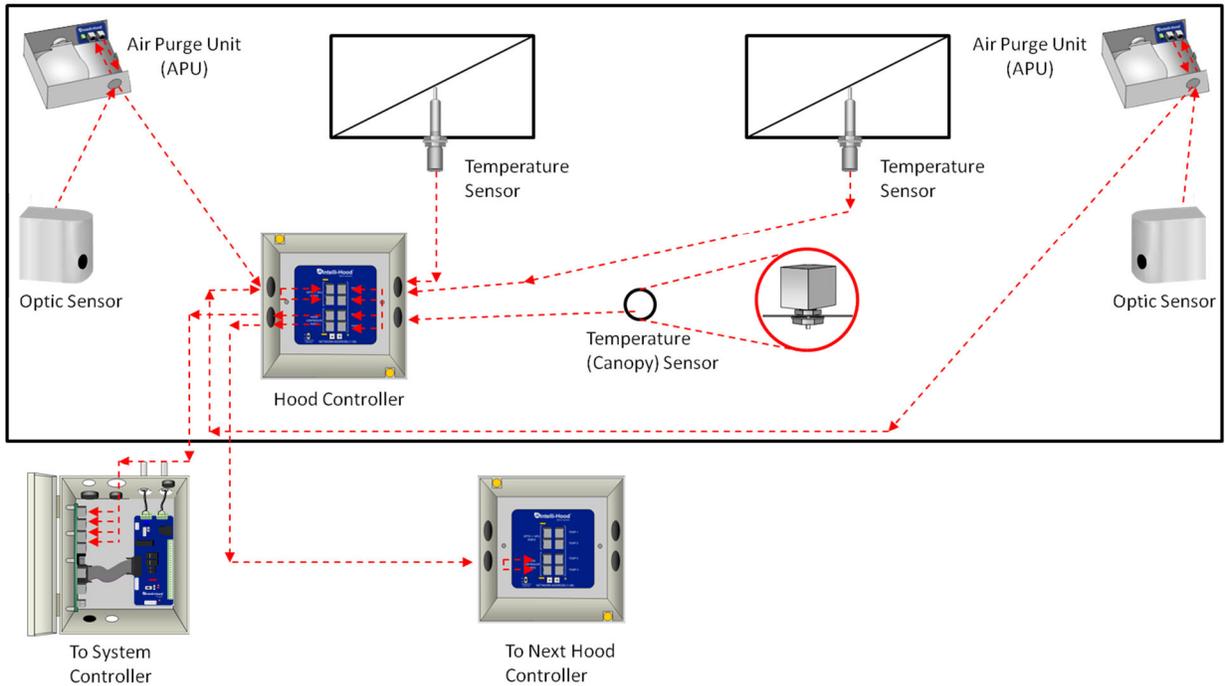
STEP

9

## Install Cables (Hood Controller)

M

### Possible Hood Layout



For each Hood Controller, the following sensors may be connected:

- One set of Optic Sensors
- Four Temperature Sensors (Programmable options for each sensor include Exhaust Duct, Hood Canopy, Supply Air, or Kitchen Space.)

The Hood Network has different types of devices. Refer to the Submittal and Technical Overview Document for general information regarding each of these devices. A System Controller can have several devices of each type connected to it. The possible quantities of each device are listed below.

Device	Max Unassisted Single Port Capacity	Max Unassisted System Controller Capacity
Hood Controller (HC)	2	8
Touchpad (TP)	2	8



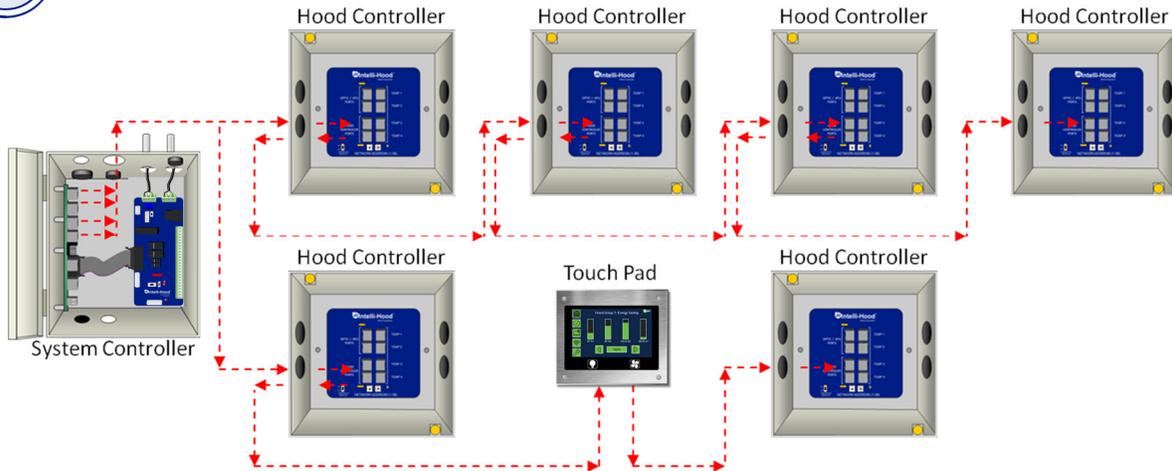
STEP

9

## Install Cables (Hood Controller)

N

### Connect Hood Controllers



The System Controller has a limited amount of power output capacity with the included power supply. Up to (8) Hood Controllers with Optics\* may be connected across the four Hood Network ports. Also, each Hood Network Port is power/current-limited. Cable length must be taken into account when connecting the Hood Controller Network strings. The following table indicates the allowable load based on maximum cable distance to the respective Hood Network Port.

\* NOTE: Lite Model System Controllers have (2) Hood Network Ports and a maximum capacity of (4) Hood Controllers

Max Number of Hood Controllers with Optics in Hood Network String	Allowable total cable distance from the System Controller to the last Hood Network device
1	450 feet
2	200 feet

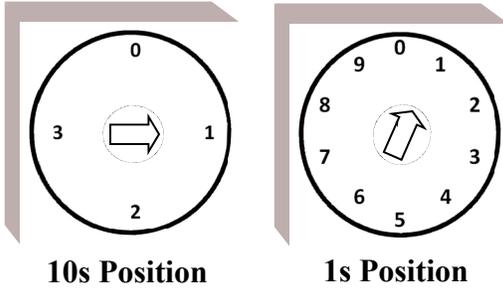
### Recommended Wiring Practices

- Order Hood Controllers so that the lowest Hood Controller addresses are connected to Hood Network Port 1, then Port 2, etc.
- The Touchpad should be the first device in the string from the System Controller.
- When possible, isolate the Touchpad on its own port (simplifies Troubleshooting).
- Last device in each Hood Network String should have the termination resistor switched to ON.
- All wiring is restricted to same room.

## Setting Addresses

**A**

### Hood Controllers



Set the Hood Controller address by setting the 10s and 1s address switches respectively. Each Hood Controller must have a unique address.

**B**

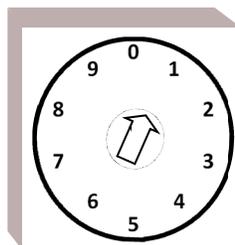
### Touchpad



Set the Touchpad address through the Configuration Menu. See Operations manual for details. Each Touchpad must have a unique address.

**C**

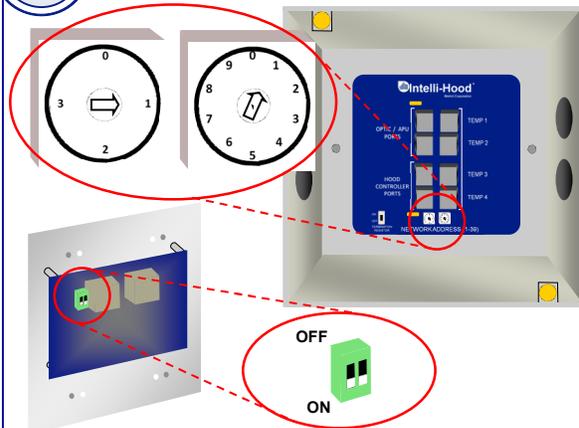
### Aux Lighting Controller



Set the address for the Aux Lighting Controller by setting their respective rotary switches. Each device must have a unique address.

**D**

### Termination Resistor



Set the Termination resistor to ON for the last device plugged into each Hood Network String. **WARNING: DO NOT TURN ON ALL TERMINATION RESISTORS IN THE STRING OR THE COMMUNICATIONS WILL NOT WORK PROPERLY.**



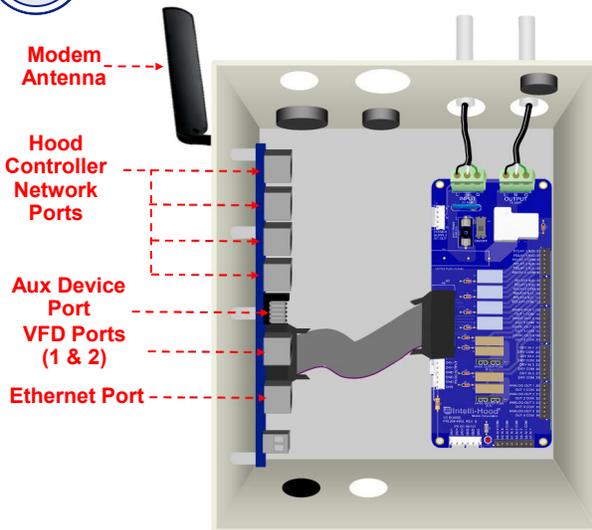
STEP

11

## System Options

A

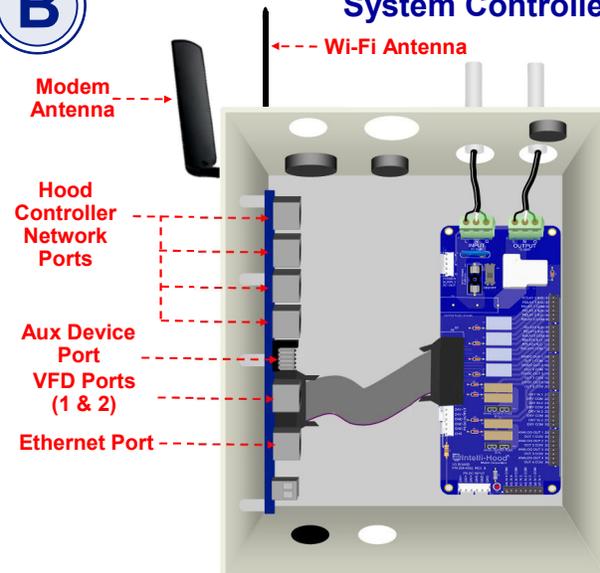
### System Controller (Model SC4)



The Model SC4 has (4) Hood Controller Network Ports, (1) Aux Device Port, (2) VFD Ports, (1) Ethernet Port, and an optional wireless modem.

B

### System Controller Lite (Model SC4-P)



The Model SC4-P has (4) Hood Controller Network Ports, (1) Aux Device Port, (2) VFD Ports, (1) Ethernet Port, Wi-Fi, PCIe expansion capability, and an optional wireless modem.

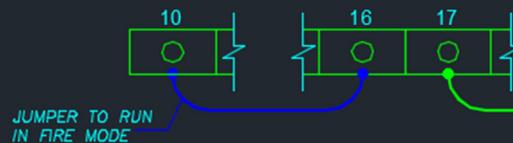
## Fire Suppression Interlock

**A**

### Fire Suppression Interlock

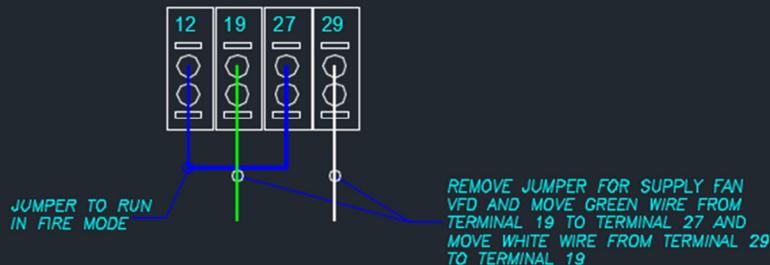
If you installed a VFD for a make-up air or supply fan, then you will likely need to make sure it is interlocked with the fire suppression system. The purpose is that most local codes require the supply fan(s) to shut down in the event of a fire. This is accomplished by wiring the System Controller to lose power if the fire suppression system is activated (known as "Fire Mode"). This can be accomplished by either wiring the System Controller via a shunt-trip breaker or running the power through a micro-switch on the fire suppression system. By default VFDs will run at 100% during Fire Mode; to configure them to shut down follow the instructions below based on the type of VFD you have installed.

#### ABB ACH-580 VFD CONTROL TERMINAL BLOCK



IF THE FAN IS TO SHUT DOWN IN A FIRE EVENT, THE JUMPER BETWEEN TERMINALS 10 AND 16 MUST BE REMOVED AND THE GREEN WIRE ON TERMINAL 17 MUST BE MOVED TO TERMINAL 16.

#### DANFOSS FC-101 VFD CONTROL TERMINAL BLOCK



IF THE FAN IS TO SHUT DOWN IN A FIRE EVENT, THE JUMPER BETWEEN TERMINALS 12 AND 27 MUST BE REMOVED, THE GREEN WIRE ON TERMINAL 19 MUST BE MOVED TO TERMINAL 27, AND THE WHITE WIRE ON TERMINAL 29 MUST BE MOVED TO TERMINAL 19.

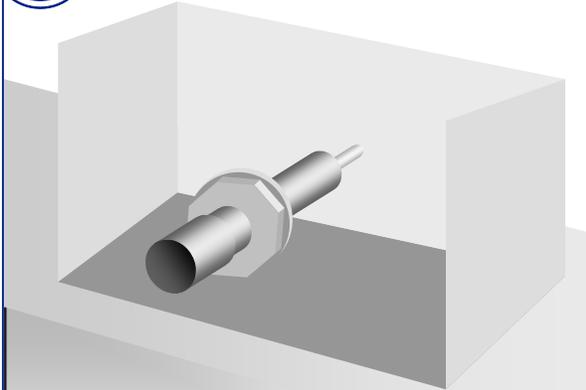


**OPTION**

**2**

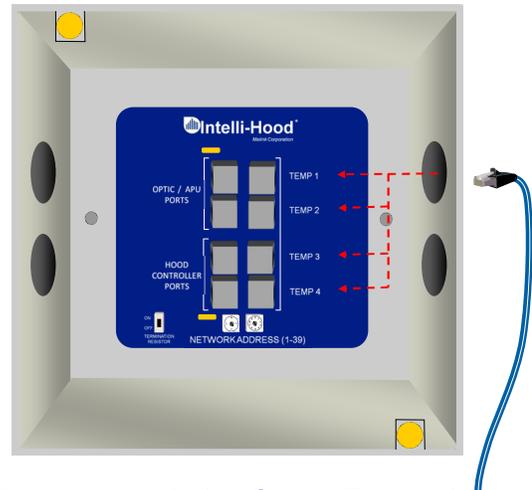
## Install Supply Temperature Sensor

### A Install Temperature Sensor



Install the Supply Temperature Sensor in the make-up air duct using one of the two mounting procedures shown in Step 4.  
**Note:** You only need to install one Supply Temperature Sensor in any given store.

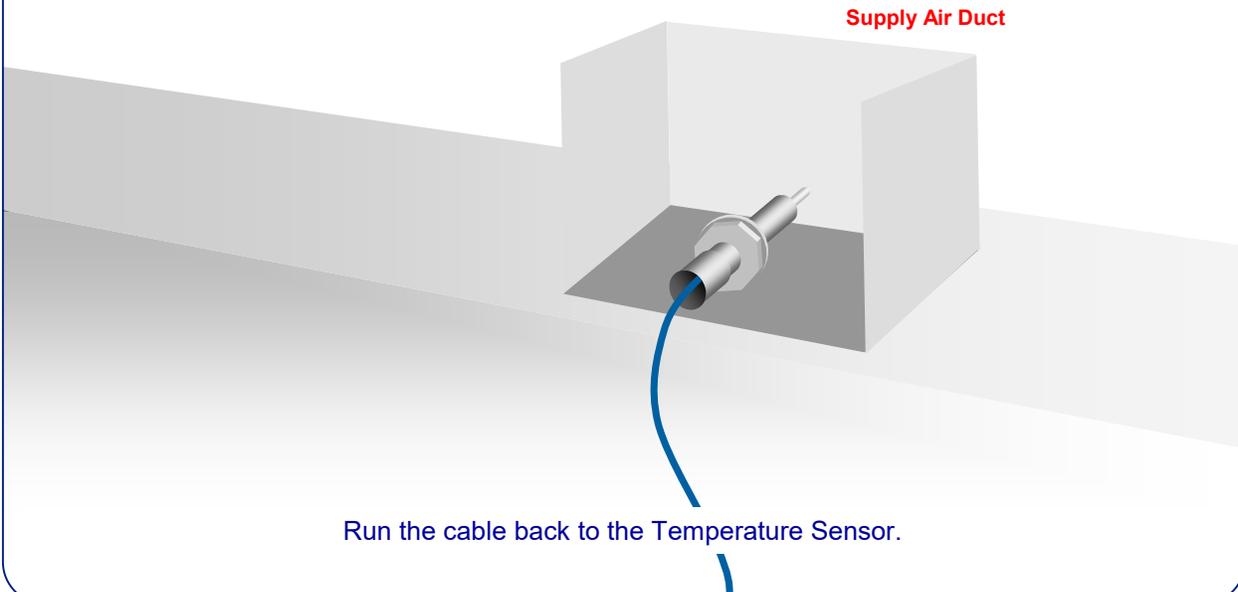
### B Plug Cable Into the Hood Controller



Plug a cable into the Supply Temperature receptacle of the Hood Controller.

**C**

### Plug Cable Into Temperature Sensor



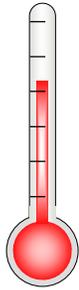
Run the cable back to the Temperature Sensor.

**OPTION****3**

## Install Kitchen Temperature

**A**

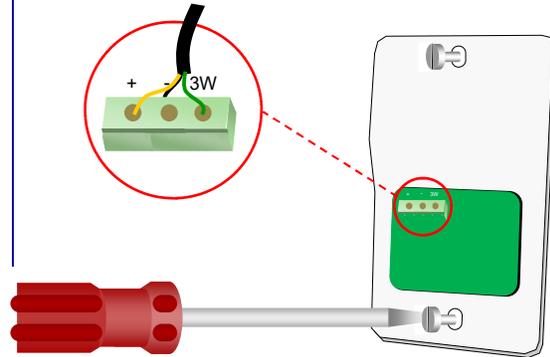
### Select Suitable Location



The Kitchen Temperature Sensor must be located away from any hot or cold spots (such as above a kitchen appliance or underneath a ceiling diffuser). Choose a location that best represents the average temperature of the kitchen.

**B**

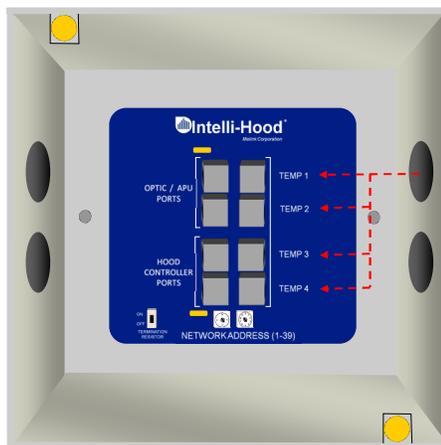
### Attach Base to Wall



Detach the base from the cover and secure it to the selected location on the wall. Connect one end of the cable to the terminal block on the base as shown.

**C**

### Connect Cable to Hood Controller



Connect the other end of the cable to one of the temperature ports inside the Hood Controller.







## Typical Drawing

		PROJECT: <b>MELINK-HOOD A</b> SYSTEM DRAWING	
THIS DOCUMENT AND ALL ATTACHED DRAWINGS, SPECIFICATIONS, SCHEDULES, AND NOTES SHALL BE THE PROPERTY OF MELINK CORPORATION. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF MELINK CORPORATION.		SERIAL NUMBER: XXXXXXXX VXXXXXXXX	
<b>DETAIL 1: SYSTEM CONTROLLER BASE BOARD</b> <p>1. A WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>		<b>DETAIL 2: HOOD CONTROLLER BOARD</b> <p>1. A WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE WIRE BUNDLE MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>	
<b>DETAIL 4: ABB ECLIPSE BYPASS VFD</b> <p>1. WIRE THE VFD TO THE SUPPLY AND LOAD. THE VFD MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE VFD MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>		<b>DETAIL 5: WIRING TO MUA UNIT</b> <p>1. WIRE THE MUA UNIT TO THE SUPPLY AND LOAD. THE MUA UNIT MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE MUA UNIT MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>	
<b>DETAIL 6: WIRING TO MUA UNIT</b> <p>1. WIRE THE MUA UNIT TO THE SUPPLY AND LOAD. THE MUA UNIT MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE MUA UNIT MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>		<b>DETAIL 7: WIRING FOR 4G AND WIFI ANTENNAS</b> <p>1. THE MELINK INTELLI-HOOD SYSTEM CONTROLLER IS EQUIPPED WITH A 4G CELL MODULE FOR 4G SERVICE. THE 4G CELL MODULE IS EQUIPPED WITH A 4G ANTENNA. THE 4G ANTENNA IS EQUIPPED WITH A 4G ANTENNA. THE 4G ANTENNA IS EQUIPPED WITH A 4G ANTENNA.</p>	
<b>ABB INSTALLATION INSTRUCTIONS</b> <p>1. CHECK THE VFD RATING TO BE SURE IT IS APPROPRIATE FOR THE MOTOR. THE VFD RATING MUST BE SURE IT IS APPROPRIATE FOR THE MOTOR. THE VFD RATING MUST BE SURE IT IS APPROPRIATE FOR THE MOTOR.</p>		<b>DETAIL 8: NOT USED</b>	
<b>MELINK SYSTEM CONTROLLER WIRING</b> <p>1. WIRE THE MELINK SYSTEM CONTROLLER TO THE SUPPLY AND LOAD. THE MELINK SYSTEM CONTROLLER MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD. THE MELINK SYSTEM CONTROLLER MUST BE INSTALLED IN THE HOOD TO CONNECT THE SYSTEM CONTROLLER TO THE HOOD.</p>			



## Program Settings

#	Parameter	Default Value	Range of Values
<b>Hood Controller Parameters</b>			
HCxx-01	Hood Controller Address	1	0 To 39
HCxx-02	Name	HC-x	Up To 20 Characters
HCxx-03	Optic Sensor	Yes	Yes or <u>No</u>
HCxx-04	Temp Channel 1	Hood	No, Hood, On/Off, Supply, Space, Auto Span
HCxx-05	Temp Channel 1 Span Max. (°F)	90	50F To 200F (Increments Of 5F)
HCxx-06	Temp Channel 2	No	No, Hood, On/Off, Supply, Space, Auto Span
HCxx-07	Temp Channel 2 Span Max. (°F)	Match Channel 1	50F To 200F (Increments Of 5F), Match Channel 1
HCxx-08	Temp Channel 3	No	No, Hood, On/Off, Supply, Space, Auto Span
HCxx-09	Temp Channel 3 Span Max. (°F)	Match Channel 1	50F To 200F (Increments Of 5F), Match Channel 1
HCxx-10	Temp Channel 4	No	No, Hood, On/Off, Supply, Space, Auto Span
HCxx-11	Temp Channel 4 Span Max. (°F)	Match Channel 1	50F To 200F (Increments Of 5F), Match Channel 1
HCxx-12	Temp Actual Channel 1	Measured Temp	User Inputs Actual Temperature 0 To 500F
HCxx-13	Temp Actual Channel 2	Measured Temp	User Inputs Actual Temperature 0 To 500F
HCxx-14	Temp Actual Channel 3	Measured Temp	User Inputs Actual Temperature 0 To 500F
HCxx-15	Temp Actual Channel 4	Measured Temp	User Inputs Actual Temperature 0 To 500F
HCxx-16	Temp Channel 1 Span Min. (°F)	75	50F to 90F (Increments of 1F)
HCxx-17	Temp Channel 2 Span Min. (°F)	Match Channel 1	50F to 90F (Increments of 1F), Match Channel 1
HCxx-18	Temp Channel 3 Span Min. (°F)	Match Channel 1	50F to 90F (Increments of 1F), Match Channel 1
HCxx-19	Temp Channel 4 Span Min. (°F)	Match Channel 1	50F to 90F (Increments of 1F), Match Channel 1
HCxx-20	Optic Smoke Density	Medium	Low, Medium, or High
HCxx-21	BACnet Device Instance ID	0	0 to 4194302
HCxx-22	Active on BACnet	No	Yes or <u>No</u>

### Exhaust Hood Parameters

EHxx-01	Primary Exhaust ID	1	1 to 39
EHxx-02	Name	Hood xx	Up To 20 Characters
EHxx-03	Minimum Speed	30%	30% To 100%, Increments Of 5%
EHxx-04	Maximum Speed	100%	30% To 100%, Increments Of 5%
EHxx-05	Temperature Sensor Node(s)	None	01-1 to 39-4
EHxx-06	Optic Sensor Node(s)	None	1 to 39; Sensors listed in format of "Address".
EHxx-07	Auto On Hood Temperature	Not Used	Not Used, Auto On 70F - 120F
EHxx-08	Auto On Space Differential	Not Used	Not Used, Room Difference +1F - +40F
EHxx-09	Auto Off Hood Temp	Not Used	Not Used, Auto Off 65F - 100F
EHxx-10	Auto Off Space Differential	Not Used	Not Used, Room Difference +1F - +20F



## Program Settings

EHxx-11	Temperature Alarm Auto On	200F	Not Used, System, 100F, 125F, 150F, 200F, 250F, 300F
EHxx-12	Short Cycle Ratio	Not Used	Not Used, 20%, 30%, 40%, 50%, 60%, 70%, 80%
EHxx-13	Exhaust Volume	1000	0 to 100,000
EHxx-14	Hood Group	1	1-10
EHxx-15	Optic Hang time	System	System, 5, 10, 15, 30, 45, 60, 120, 180, 300

### Exhaust Fan Parameters

EFxx-01	Primary Exhaust Address	1	1 to 39
EFxx-02	Name	EF-xx	Up To 5 Characters
EFxx-03	Output Type	ABB ACH550	System Output Allen Bradley <u>Powerflex</u> 4/40 Allen Bradley <u>Powerflex</u> 400 ABB ACH550 Danfoss FC101 Danfoss FC102 / Trane TR200 LSIS SV-IS7 Siemens G120P Schneider <u>Altivar</u> 212 Yaskawa Z1000
EFxx-04	BACnet Device Instance ID	0	0 to 4194302
EFxx-05	Display Status	Yes	Yes or <u>No</u>
EFxx-06	Active on BACnet	Yes	Yes or <u>No</u>

### Aux Airflow Parameters

AAxx-01	Aux Airflow Address	41	40 to 128
AAxx-02	Name	AA-xx	Up To 5 Characters
AAxx-03	Algorithm	Average	Average, Highest, Lowest
AAxx-04	Related Airflows	None	List All Exhaust and Aux Airflows
AAxx-05	Output Type	ABB ACH550	System Output Allen Bradley <u>Powerflex</u> 4/40 Allen Bradley <u>Powerflex</u> 400 ABB ACH550 Danfoss FC101 Danfoss FC102 / Trane TR200 LSIS SV-IS7 Siemens G120P Schneider <u>Altivar</u> 212 Yaskawa Z1000
AAxx-06	Design Airflow	1000	0 to 100,000
AAxx-07	BACnet Device Instance ID	0	0 to 4194302
AAxx-08	Display Status	Yes	Yes or <u>No</u>
AAxx-09	Active on BACnet	Yes	Yes or <u>No</u>



## Program Settings

### System Parameters

SY-01	Address	1	1
SY-02	Name	System Controller	Up To 20 Characters
SY-03	Relay 1 Output	None	None Exhaust Temp Alarm Smoke Fan On MUA Damper Temperature Fault Optic Fault VFD Fault System Fault 24/7 External Relay Reset
SY-04	Groups Affecting Relay 1 Output	1	1 to 10
SY-05	Relay 2 Output	None	Same as SY-03
SY-06	Groups Affecting Relay 2 Output	1	1 to 10
SY-07	Relay 3 Output	None	Same as SY-03
SY-08	Groups Affecting Relay 3 Output	1	1 to 10
SY-09	Relay 4 Output	None	Same as SY-03
SY-10	Groups Affecting Relay 4 Output	1	1 to 10
SY-11	24VDC Output 1	MUA Damper	Same as SY-03
SY-12	Groups Affecting 24VDC Output 1	1	1 to 10
SY-13	24VDC Output 2	MUA Damper	Same as SY-03
SY-14	Groups Affecting 24VDC Output 2	1	1 to 10
SY-15	24VDC Output 3	MUA Damper	Same as SY-03
SY-16	Groups Affecting 24VDC Output 3	1	1 to 10
SY-17	24VDC Output 4	None	Same as SY-03
SY-18	Groups Affecting 24VDC Output 4	1	1 to 10
SY-19	Digital Input 1	None	None Exhaust Temp Alarm Smoke Fan On MUA Damper Temperature Fault Optic Fault VFD Fault System Fault 24/7 External Relay Reset
SY-20	Groups Affected by Digital Input 1	1	1 to 10



## Program Settings

SY-21	Digital Input 2	None	Same as SY-11
SY-22	Groups Affected by Digital Input 2	1	1 to 10
SY-23	Digital Input 3	None	Same as SY-11
SY-24	Groups Affected by Digital Input 3	1	1 to 10
SY-25	Digital Input 4	None	Same as SY-11
SY-26	Groups Affected by Digital Input 4	1	1 to 10
SY-27	Analog Output 1 Algorithm	Average	None, Average, Highest, Lowest
SY-28	Analog Output 1 Related Airflows	None	List all Exhaust and Aux Airflows
SY-29	Analog Output 1 Type	0-10VDC	0-10VDC, 0-20mA
SY-30	Analog Output 1 Min	0	0 to 100
SY-31	Analog Output 1 Max	100	0 to 100
SY-32	Analog Output 2 Algorithm	Average	None, Average, Highest, Lowest
SY-33	Analog Output 2 Related Airflows	None	List all Exhaust and Aux Airflows
SY-34	Analog Output 2 Type	0-10VDC	0-10VDC, 0-20mA
SY-35	Analog Output 2 Min	0	0 to 100
SY-36	Analog Output 2 Max	100	0 to 100
SY-37	Analog Output 3 Algorithm	Average	None, Average, Highest, Lowest
SY-38	Analog Output 3 Related Airflows	None	List all Exhaust and Aux Airflows
SY-39	Analog Output 3 Type	0-10VDC	0-10VDC, 0-20mA
SY-40	Analog Output 3 Min	0	0 to 100
SY-41	Analog Output 3 Max	100	0 to 100
SY-42	Analog Output 4 Algorithm	Average	None, Average, Highest, Lowest
SY-43	Analog Output 4 Related Airflows	None	List all Exhaust and Aux Airflows
SY-44	Analog Output 4 Type	0-10VDC	0-10VDC, 0-20mA
SY-45	Analog Output 4 Min	0	0 to 100
SY-46	Analog Output 4 Max	100	0 to 100
SY-47	Analog Input 1 Function	Not In Use	Not in Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
SY-48	Analog Input 1 Minimum	0	0 to 100
SY-49	Analog Input 1 Maximum	100	0 to 100
SY-50	Analog Input 1 Scale	100	0 to 100
SY-51	Analog Input 1 Remote On Threshold	0	0 to 100
SY-52	Analog Input 1 Associated Groups	1	1 to 10
SY-53	Analog Input 1 Type	0-20mA	0-10VDC, 0-20mA



## Program Settings

SY-54	Analog Input 2 Function	Not In Use	Not in Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
SY-55	Analog Input 2 Minimum	0	0 to 100
SY-56	Analog Input 2 Maximum	100	0 to 100
SY-57	Analog Input 2 Scale	100	0 to 100
SY-58	Analog Input 2 Remote On Threshold	0	0 to 100
SY-59	Analog Input 2 Associated Groups	1	1 to 10
SY-60	Analog Input 2 Type	0-20mA	0-10VDC, 0-20mA
SY-61	Analog Input 3 Function	Not In Use	Not in Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
SY-62	Analog Input 3 Minimum	0	0 to 100
SY-63	Analog Input 3 Maximum	100	0 to 100
SY-64	Analog Input 3 Scale	100	0 to 100
SY-65	Analog Input 3 Remote On Threshold	0	0 to 100
SY-66	Analog Input 3 Associated Groups	1	1 to 10
SY-67	Analog Input 3 Type	0-20mA	0-10VDC, 0-20mA
SY-68	Analog Input 4 Function	Not In Use	Not in Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
SY-69	Analog Input 4 Minimum	0	0 to 100
SY-70	Analog Input 4 Maximum	100	0 to 100
SY-71	Analog Input 4 Scale	100	0 to 100
SY-72	Analog Input 4 Remote On Threshold	0	0 to 100
SY-73	Analog Input 4 Associated Groups	1	1 to 10
SY-74	Analog Input 4 Type	0-20mA	0-10VDC, 0-20mA
SY-75	Default Maximum Operating Frequency	60	0 to 120
SY-76	Bypass Timer	10 min	30 sec, 1 min, 5 min, 10 min, 20 min, 30 min, 1 hr, 2 hr, 4 hr
SY-77	Optic Hang Time	15 sec	5 sec, 10 sec, 15 sec, 30 sec, 60 sec, 90 sec, 120 sec, 180 sec, 240 sec, 300 sec
SY-78	Fan Speed Reporting Method	VFD Feedback	VFD Feedback, Command Speed
SY-79	Temperature Alarm Auto On	200F	Not Used, System, 100F, 125F, 150F, 200F, 250F, 300F
SY-80	Data Log Sample Rate	5 minutes	10s, 30s, 1min, 2min, 3min, 5min, 10min, 30min
SY-81	Auto On, Manual Off, Delay Time	2 minutes	10s, 30s, 1min, 2min, 3min, 5min, 10min, 30min
SY-82	Unit Display	12H/F	12H/F, 24H/F, 12H/C, 24H/C



## Program Settings

SY-86	BACnet IP Type	IPv4	IPv4, IPv6
SY-87	BACnet Multicast	ff05 - site local	ff01 - interface local, ff02 - link local, ff04 - admin local, ff05 - site local, ff08 - organization local, ff0e - global
SY-88	BACnet/IPv6 Address Type	Link Local	Link Local, Global
SY-89	Enable Remote Access	Yes	Yes or No
SY-90	Enable Webserver	Yes	Yes or No
SY-91	Enable Backup NTP Sources	Yes	Yes or No

### Touchpad Parameters

TPx-01	Touchpad Hood Network Address	1	1-10
TPx-02	Name	TP-01	Up To 20 Characters
TPx-03	Light Controller Addresses	System Controller	System Controller, LC-01 to LC-10
TPx-04	Bypass Softkey Visible	Yes	Yes Or No
TPx-05	Lights Button Active	Yes	Yes Or No
TPx-06	Fans Button Active	Yes	Yes Or No
TPx-07	Associated Groups On/Off	1	1 to 10
TPx-08	Hood Groups Displayed	1	1 to 10

SY-98	BACnet Auto Number	Yes	Yes or No
SY-99	BACnet Port	47808	47808 to 65535
SY-100	BACnet DNET	654	1 to 65534
SY-101	BACnet Watchdog	0	0 to 600 (seconds)
SY-102	BACnet IP Type	IPv4	IPv4, IPv6
SY-103	BACnet Multicast	ff05 - site local	ff01 - interface local, ff02 - link local, ff04 - admin local, ff05 - site local, ff08 - organization local, ff0e - global
SY-104	BACnet/IPv6 Address Type	Link Local	Link Local, Global
SY-105	Enable Remote Access	Yes	Yes or No
SY-106	Enable Webserver	Yes	Yes or No
SY-107	Enable Backup NTP Sources	Yes	Yes or No
SY-108	Wi-Fi	Off	Off, Create Network, Join Network
SY-109	Wi-Fi Name	wifi	Up To 30 Characters
SY-110	Wi-Fi Password	WiFiPassword	Up To 30 Characters

## Program Settings

### Touchpad Parameters

TPx-01	Touchpad Hood Network Address	1	1-10
TPx-02	Name	TP-01	Up To 20 Characters
TPx-03	Light Controller Addresses	System Controller	System Controller, LC-01 to LC-10
TPx-04	Bypass Softkey Visible	Yes	Yes Or No
TPx-05	Lights Button Active	Yes	Yes Or No
TPx-06	Fans Button Active	Yes	Yes Or No
TPx-07	Associated Groups On/Off	1	1 to 10
TPx-08	Hood Groups Displayed	1	1 to 10



## Program Settings

### Scheduling Parameters

SDxx-01	Schedule ID	1	1 to 10
SDxx-02	Schedule Name	Schedule x	Up to 20 Characters
SDxx-03	Groups	All Selected	1 to 10
SDxx-04	Action Start	None	None, Fans On, Fans Off, Preset Minimum, Calculated Minimum
SDxx-05	Action End	None	None, Fans On, Fans Off, Preset Minimum, Calculated Minimum
SDxx-06	Month Start	January	January through December
SDxx-07	Day Start	1	1 to 31
SDxx-08	Month End	December	January through December
SDxx-09	Day End	31	1 to 31
SDxx-10	Days of Week	All Selected	Sun to Sat
SDxx-11	Time Start	08:00	00:00 to 23:59
SDxx-12	Time End	22:00	00:00 to 23:59
SDxx-13	Preset Speed	100	0 to 100

### Analog Output Module Parameters

AOMx-01	Address	101	1 to 254
AOMx-02	Name	AOM-x	Up to 20 Characters
AOMx-03	Analog Output 0 Algorithm	Average	None, Average, Highest, Lowest
AOMx-04	Analog Output 0 Related Airflows	None	List All Exhaust and Aux Airflows
AOMx-05	Analog Output 0 Min	0	0 to 100
AOMx-06	Analog Output 0 Max	100	0 to 100
AOMx-07	Analog Output 0 Type	0-10VDC	0-10VDC, 0-20mA
AOMx-08	Analog Output 1 Algorithm	Average	None, Average, Highest, Lowest
AOMx-09	Analog Output 1 Related Airflows	None	List All Exhaust and Aux Airflows
AOMx-10	Analog Output 1 Min	0	0 to 100
AOMx-11	Analog Output 1 Max	100	0 to 100
AOMx-12	Analog Output 1 Type	0-10VDC	0-10VDC, 0-20mA
AOMx-13	Analog Output 2 Algorithm	Average	None, Average, Highest, Lowest
AOMx-14	Analog Output 2 Related Airflows	None	List All Exhaust and Aux Airflows
AOMx-15	Analog Output 2 Min	0	0 to 100
AOMx-16	Analog Output 2 Max	100	0 to 100
AOMx-17	Analog Output 2 Type	0-10VDC	0-10VDC, 0-20mA
AOMx-18	Analog Output 3 Algorithm	Average	None, Average, Highest, Lowest
AOMx-19	Analog Output 3 Related Airflows	None	List All Exhaust and Aux Airflows
AOMx-20	Analog Output 3 Min	0	0 to 100
AOMx-21	Analog Output 3 Max	100	0 to 100
AOMx-22	Analog Output 3 Type	0-10VDC	0-10VDC, 0-20mA
AOMx-23	Digital Input 0	None	Same as SY-11
AOMx-24	Groups Affected by Digital Input 0	1	1 to 10
AOMx-25	Digital Input 1	None	Same as SY-11
AOMx-26	Groups Affected by Digital Input 1	1	1 to 10
AOMx-27	Digital Input 2	None	Same as SY-11
AOMx-28	Groups Affected by Digital Input 2	1	1 to 10

## Program Settings

AOMx-29	Digital Input 3	None	Same as SY-11
AOMx-30	Groups Affected by Digital Input 3	1	1 to 10

### Digital Input Module Parameters

DIMx-01	Address	111	1 to 254
DIMx-02	Name	DIM-x	Up to 20 Characters
DIMx-03	Digital Input 0	None	Same as SY-11
DIMx-04	Groups Affected by Digital Input 0	1	1 to 10
DIMx-05	Digital Input 1	None	Same as SY-11
DIMx-06	Groups Affected by Digital Input 1	1	1 to 10
DIMx-07	Digital Input 2	None	Same as SY-11
DIMx-08	Groups Affected by Digital Input 2	1	1 to 10
DIMx-09	Digital Input 3	None	Same as SY-11
DIMx-10	Groups Affected by Digital Input 3	1	1 to 10
DIMx-11	Digital Input 4	None	Same as SY-11
DIMx-12	Groups Affected by Digital Input 4	1	1 to 10
DIMx-13	Digital Input 5	None	Same as SY-11
DIMx-14	Groups Affected by Digital Input 5	1	1 to 10
DIMx-15	Digital Input 6	None	Same as SY-11
DIMx-16	Groups Affected by Digital Input 6	1	1 to 10
DIMx-17	Digital Input 7	None	Same as SY-11
DIMx-18	Groups Affected by Digital Input 7	1	1 to 10
DIMx-19	Digital Input 8	None	Same as SY-11
DIMx-20	Groups Affected by Digital Input 8	1	1 to 10
DIMx-21	Digital Input 9	None	Same as SY-11
DIMx-22	Groups Affected by Digital Input 9	1	1 to 10
DIMx-23	Digital Input 10	None	Same as SY-11
DIMx-24	Groups Affected by Digital Input 10	1	1 to 10
DIMx-25	Digital Input 11	None	Same as SY-11
DIMx-26	Groups Affected by Digital Input 11	1	1 to 10
DIMx-27	Digital Input 12	None	Same as SY-11
DIMx-28	Groups Affected by Digital Input 12	1	1 to 10
DIMx-29	Digital Input 13	None	Same as SY-11
DIMx-30	Groups Affected by Digital Input 13	1	1 to 10
DIMx-31	Digital Input 14	None	Same as SY-11
DIMx-32	Groups Affected by Digital Input 14	1	1 to 10
DIMx-33	Digital Input 15	None	Same as SY-11
DIMx-34	Groups Affected by Digital Input 15	1	1 to 10



## Program Settings

### Digital Output Module Parameters

DOMx-01	Address	111	1 to 254
DOMx-02	Name	DOM-x	Up to 20 Characters
DOMx-03	Relay 0 Output	None	Same as SY-03
DOMx-04	Groups Affecting Relay 0 Output	1	1 to 10
DOMx-05	Relay 1 Output	None	Same as SY-03
DOMx-06	Groups Affecting Relay 1 Output	1	1 to 10
DOMx-07	Relay 2 Output	None	Same as SY-03
DOMx-08	Groups Affecting Relay 2 Output	1	1 to 10
DOMx-09	Relay 3 Output	None	Same as SY-03
DOMx-10	Groups Affecting Relay 3 Output	1	1 to 10
DOMx-11	Relay 4 Output	None	Same as SY-03
DOMx-12	Groups Affecting Relay 4 Output	1	1 to 10
DOMx-13	Relay 5 Output	None	Same as SY-03
DOMx-14	Groups Affecting Relay 5 Output	1	1 to 10
DOMx-15	Relay 6 Output	None	Same as SY-03
DOMx-16	Groups Affecting Relay 6 Output	1	1 to 10
DOMx-17	Relay 7 Output	None	Same as SY-03
DOMx-18	Groups Affecting Relay 7 Output	1	1 to 10

### Virtual Input Module Parameters

VIMx-01	Address	1	1 to 254
VIMx-02	Name	VIM-x	Up to 20 Characters
VIMx-03	Virtual Input 1	None	Same as SY-11
VIMx-04	Groups Affected by Virtual Input 1	1	1 to 10
VIMx-05	Virtual Input 2	None	Same as SY-11
VIMx-06	Groups Affected by Virtual Input 2	1	1 to 10
VIMx-07	Virtual Input 3	None	Same as SY-11
VIMx-08	Groups Affected by Virtual Input 3	1	1 to 10
VIMx-09	Virtual Input 4	None	Same as SY-11
VIMx-10	Groups Affected by Virtual Input 4	1	1 to 10
VIMx-11	BACnet Device Instance ID	0	0-4194302

### Virtual Output Module Parameters

VOMx-01	Address	11	1 to 254
VOMx-02	Name	VOM-x	Up to 20 Characters
VOMx-03	Virtual Output 1	None	Same as SY-03
VOMx-04	Groups Affecting Virtual Output 1	1	1 to 10
VOMx-05	Virtual Output 2	None	Same as SY-03
VOMx-06	Groups Affecting Virtual Output 2	1	1 to 10
VOMx-07	Virtual Output 3	None	Same as SY-03
VOMx-08	Groups Affecting Virtual Output 3	1	1 to 10
VOMx-09	Virtual Output 4	None	Same as SY-03
VOMx-10	Groups Affecting Virtual Output 4	1	1 to 10
VOMx-11	BACnet Device Instance ID	0	0-4194302

## Program Settings

### Aux Lighting Controller Parameters

LCx-01	Lighting Controller Address	1	0-9
LCx-02	Name	ALC-1	Up To 20 Characters

### Analog Input Module Parameters

AIMx-01	Aux Power Hood Network Address	131	131-140
AIMx-02	Name	AIM-01	Up To 20 Characters
AIMx-03	AIO Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-04	AIO Minimum	0	0 to 100
AIMx-05	AIO Maximum	100	0 to 100
AIMx-06	AIO Type	0-20mA	0-20mA, 0-10VDC
AIMx-07	AIO Scale	100	0 to 100
AIMx-08	AIO Remote On Threshold	0	0 to 100
AIMx-09	AIO Associated Groups	1	1 to 10
AIMx-10	A11 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-11	A11 Minimum	0	0 to 100
AIMx-12	A11 Maximum	100	0 to 100
AIMx-13	A11 Type	0-20mA	0-20mA, 0-10VDC
AIMx-14	A11 Scale	100	0 to 100
AIMx-15	A11 Remote On Threshold	0	0 to 100
AIMx-16	A11 Associated Groups	1	1 to 10
AIMx-17	A12 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-18	A12 Minimum	0	0 to 100
AIMx-19	A12 Maximum	100	0 to 100
AIMx-20	A12 Type	0-20mA	0-20mA, 0-10VDC
AIMx-21	A12 Scale	100	0 to 100
AIMx-22	A12 Remote On Threshold	0	0 to 100
AIMx-23	A12 Associated Groups	1	1 to 10
AIMx-24	A13 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-25	A13 Minimum	0	0 to 100
AIMx-26	A13 Maximum	100	0 to 100
AIMx-27	A13 Type	0-20mA	0-20mA, 0-10VDC
AIMx-28	A13 Scale	100	0 to 100
AIMx-29	A13 Remote On Threshold	0	0 to 100
AIMx-30	A13 Associated Groups	1	1 to 10
AIMx-31	A14 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-32	A14 Minimum	0	0 to 100
AIMx-33	A14 Maximum	100	0 to 100
AIMx-34	A14 Type	0-10VDC	0-20mA, 0-10VDC
AIMx-35	A14 Scale	100	0 to 100
AIMx-36	A14 Remote On Threshold	0	0 to 100
AIMx-37	A14 Associated Groups	1	1 to 10



## Program Settings

AIMx-38	AI5 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-39	AI5 Minimum	0	0 to 100
AIMx-40	AI5 Maximum	100	0 to 100
AIMx-41	AI5 Type	0-10VDC	0-20mA, 0-10VDC
AIMx-42	AI5 Scale	100	0 to 100
AIMx-43	AI5 Remote On Threshold	0	0 to 100
AIMx-44	AI5 Associated Groups	1	1 to 10
AIMx-45	AI6 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-46	AI6 Minimum	0	0 to 100
AIMx-47	AI6 Maximum	100	0 to 100
AIMx-48	AI6 Type	0-10VDC	0-20mA, 0-10VDC
AIMx-49	AI6 Scale	100	0 to 100
AIMx-50	AI6 Remote On Threshold	0	0 to 100
AIMx-51	AI6 Associated Groups	1	1 to 10
AIMx-52	AI7 Function	Not In Use	Not In Use, Highest, Add, Average, Aux. Highest, Aux. Add, Aux. Average
AIMx-53	AI7 Minimum	0	0 to 100
AIMx-54	AI7 Maximum	100	0 to 100
AIMx-55	AI7 Type	0-10VDC	0-20mA, 0-10VDC
AIMx-56	AI7 Scale	100	0 to 100
AIMx-57	AI7 Remote On Threshold	0	0 to 100
AIMx-58	AI7 Associated Groups	1	1 to 10

**Call Melink Customer Service at (513) 965-7300 if you have any questions.**

Please let us know how we can improve our Installation Manual.  
We want your experience with our product to exceed all expectations.

