

# **MUA Filter Pressure Sensor**

#### **FPS Installation Guide**

This document is applicable to BBCB-A-1-1 Make-Up Air Controllers.

This document will take you through the upgrade to include the filter delta P sensor. A pressure sensor is used to determine the "dirtiness" (or pressure drop) of the Make-Up Air Unit Filters. This is helpful in determining when the filters need to be replaced. Because every installation is different and the Make-Up Air usage is different for every house hold, it is advisable to slowly determine at what filter pressure the filters need to be replaced.

Every V-Bank Filter Box comes with two pressure measuring ports installed and in most cases covered by a piece of aluminum tape.

Remove the tape from the back of the V-Bank Filter Box Assembly.

Disconnect the Make-Up Air power cord.

If the MUA Control box was mounted, remove the box mounting screws to be able to access the rear of the MUA Control Box.





# **MUA Filter Pressure Sensor**

## **FPS Installation Guide**

Open the access cover plate, by loosening the four screws and sliding the panel sideways (use a flat blade (or hex) screwdriver).

Install the two screws from behind using two nuts (supplied) and tighten them (see above, View A-A). DO NOT over-tighten.

Install the Pressure Sensor here by sliding the sensor over the screws.

Note: orientation of the pressure sensor, install so tubing can be inserted through box wall to the sensor connections.

Secure the sensor using the two remaining nuts. DO NOT over-tighten.

Install 1/8" tubing (not included) between the V-Bank Filter Box and the Make-Up Air Control Box.

\*If the tubing does not fit snugly, heat up the ends and stretch them, then slide them on while hot so they can set in place.

#### Check the following:

Orientation of the wiring to the sensor should be: White / Red / Black (heat shrink) Yellow

Route the other end of the harness to connect to I2C Bus 1



Install the lid on to the Control Box and secure with the screws.

If you removed the control panel mounting screws, reinstall them.

Access the MUA using a browser (see MUA-IOM) and perform the following:

In the browser at the end of the IP Address type: /config and hit enter.



# **MUA Filter Pressure Sensor**

#### **FPS Installation Guide**

## The screen should look like this:

Current Config			Back to Main Pag
Sensor Configuration:		basic.conf	attic-filter.conf
Extended Mode:		true	attic.conf basic-filter.conf
Attic Module:		false	basic.conf
Vhole House Fan Mod	ule:	true	
Water Heating Module:		true	Serial Number:
Water Heating Freeze Protection:		off	
Makeup Air Proportional Gain:		1.00	Makeup Proportional Gain:
Makeup Air Integral Gain:		0.10	1.00
Makeup Air Derivative Gain:		0.50	Makeup Integral Gain:
Water Heater Proportional Gain:		1.00	0.10
			Makeup Derivative Gain:
Water Heater Integral Gain:		0.10	0.50
Water Heater Derivative Gain:		0.50	Water Heater Proportional Gain:
			1.00
			Water Heater Integral Gain:
Ch L			0.10
ystem Status			Water Heater Derivative Gain:
Board IP:	192.168.1.51		0.50
Board Type:	Make-up Air Unit		
Serial Number: NP-0000000			AIS
Date Compiled:	te Compiled: Wed Apr 19 16:19:50 PDT 2017		✓ Extended (Recirculation) Module
MAC Address:	b0:d5:cc:41:87:7c		☐ Attic Module ✔ Whole House Fan Module
Client IP:	192.168.1.64		
Jptime:	3 hours		Water Heater
Versions:	sensord v1.4.5		Vater Heater Module
	controld v1.5		Water Heater Freeze Prevention Mode
	webctrl v1.4		
			General Warning
			Setting up a hot water heating coil system may involve plumbing and controls that and beyond the average skillset. If in doubt of any safety or control concerns, please contru us at ArScape or consult a professional. In particular, it's critical to avoid contaminati

If you purchased the standard MUA unit select the "basic-filter.conf" and press the "submit" button.

If you purchased the Heating Assist Unit select the "attic-filter.config" and press the "submit" button.

Confirm your choice is loaded properly, see "current config"

And click return to main page when finished.

In the Main Access Page of the MUA interface you should now have a pressure reading for the "filter Pressure". If the reading is negative but you prefer a positive reverse the filter tubing at the control box.