

ProAir 700LI





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Changing filters in your PA700LI MVHR Unit



Filter Access, -

Unscrew the 2 thumb screws and remove the panel to access the filters





ProAir Hardware Components

The touch panel visual will be located in an area that is accessible



PCB – Located in the MVHR unit



Wireless Boost Switches





Built in Co2/Humidity and Temperature Sensors





ProAir Touchpad Panel Explained

The ProAir Touch Panel can only control basic ventilation modes and settings. The device is controlled by touching the selected function button on the touch control panel.

Button symbols and LED signal meanings:

The LEDs will light up when the device is switched on. LEDs, indicate the status of the unit when it is switched on, e.g. fan speed selected, automatic control activated, scheduling, bypass, error notifications etc

- If LED is lit, Bypass is activated

- Used to switch between Bluetooth and WiFi
- An LED illuminates to inform you when the unit is operating according to the timetable schedule set by the weekly calender
- (\widehat{A}) The speed of the fans will change automatically depending on the air quality information received from the CO2 and Humidity sensor
- + Increases or decreases the fan speed.
- LED Alert Signaling of active events from the unit. LED will light if there is an error
- EED Alert A rapidly flashing LED means that a Bluetooth signal is being emitted.

A steady lit symbol means there is an active connection to the Wi-Fi network and the internet.

A slow flashing symbol means there is a connection to a Wi-Fi network but no internet connection.

If the system is powered off for any reason and then the power comes on again, the system will start operating with the settings it had before the power outage



ProAir Touchpad Panel Overview





ProAir Apps - can be found on Google playstore or Apple store



ProAirVen Local Control – The bluetooth Application connects to the system when you are within 10 metres of the touchpad panel visual, it is design for device control and configuration



ProAirVent Connect – The Cloud application connects to the system from anywhere in the world once the Touchpad panel is setup and connected to an internet connection

ProAir Cloud Dashboard - <u>www.proairventconnect.ie</u>





App Download Links

Google Play

https://play.google.com/store/apps/details?id=ie.proairvent.connect&hl=en https://play.google.com/store/apps/details?id=com.proair.proairventlocalcontrol&hl=en

Apple Store <u>https://apps.apple.com/us/app/proairvent-connect/id6504237829</u> <u>https://apps.apple.com/us/app/proairvent-local-control/id6504237752</u>

Cloud Dashboard Website

www.proairventconnect.ie



ProAir App QR Codes

Google Play ProAirVent Local Connect



Google Play ProAirVent Connect





Apple IOS ProAirVent Connect





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Bluetooth App Walkthrough

Opening the Bluetooth App (ProAirVent Connect App) after downloading to phone device





Begin - Scan for device screen





Scan screen settings icon

User Profile







App Settings





App Information





Scanning for Connected Devices





Scanning for Connected Devices (Continued)





Device Control Home Screen

Touchpad Device settings -

Allows the user to setup an App password for limiting access control





Internet Gateway Settings

Setup system to Router

Get ProAir Vent Local Control Password

Time Synchronisation

Other Internet Gateway Settings

Ventilation Controller This is control of the PCB parameters for

Users,

ProAir Installers and

ProAir Service



Touchpad Software Update



<	Softwa gatewa	re update ly	of interr	et	
	Software	update pa	issword	0	Software perform locally v home (this is p
		Confirm			
	f		\$		
		0	<		

Software updates can be performed by an installer locally when in the owner's home

(this is password protected)



Rename Device/Setup Password





Setup Device Password









Setup Device name setup







Internet Gateway Settings





Setup Router connection

Setup Connection to the internet





Setup Router Connection (Continued)









1

Password

Enter password

2

Ο

\$

Setup Router Connection (Continued)





2FA Request Code

Needed when creating an account via a browser instead of using the app to create an account





Time Syncronization

Can sync in with any time zone from the Users phone





Touchpad Brightness, Volume and Alarm Noise Levels

The user can setup the touch panel to sound beeps when the panel is pressed, Beeps when there is an alarm fault, and also dim/brighten the LEDs





Touchpad Brightness, Volume and Alarm Noise Levels (Continued)









Ventilation Controller Settings





Ventilation Settings PCB Software Update





PCB Configuration Snapshot





User Settings



C Device settings	
ER SETTINGS	
Work modes	>
Holix modeo	/
Bypass	>





Unit Mode Settings

settings > wo	rk modes	
Jnit mode		Manual 🧪
Temperature (>	
Femperature :	schedule	s .
Current mode		Base 🧪
BOOST		Off 🧪
300ST mode	>	
Party Boost m	No 🧪	
Party Boost m	node time duration	3 h 🧪
↑	٠	\$
111	0	<




Temperature of Comfort Setting

t mode	Manual
Unit mode	
Temperature of comfort	\diamond
Temperature schedule	8 1
Current mode	Base 🧪
BOOST	Off 🧪
BOOST mode settings	>
Party Boost mode	No 🧪
Party Boost mode time duration	3 h 🧪
↑	\$
	<

rk modes > Temperature of comfort		
Temperature of comfort	Schedule	1
Comfort temperature - Day	23°C	1





Current Mode Settings







Boost On/Off







Boost Settings

Unit mode	Manual 🧪
Temperature of comfort	>
Temperature schedule	-
Current mode	Base 🧪
BOOST	Off 🧪
BOOST mode settings	>
Party Boost mode	No 🧪
Party Boost mode time duration	3 h 🧪

BOOST mode set	ings
Work modes > BOOST mode settings	
BOOST switch-off delay	15 min 🧪
BOOST switch-off delay	15 min 🧪
BOOST fan settings	1

K BOOST fan settings		
00ST mode settings > BOOST fan settings		
DOST mode settings > BOOST fan settings Supply fan control from BOOST	100%	/







Party Boost On/Off







Party Boost Time Setup

settings > wo	rk modes	
Init mode		Manual 🧪
emperature (of comfort	>
Femperature :	schedule	-
Current mode		Base 🧪
BOOST		Off 🧪
300ST mode	settings	>
Party Boost m	node	No 🧪
Party Boost m	node time duratio	on 3 h 🧪
A	٠	\$
111	Ο	<





User Settings Bypass



USER SETTINGS	
Work modes	>





Bypass Settings

er settings > Bypass	
Bypass	Auto 🧹
Bypass - opening permissible temperature	13.0°C 🥖
Bypass - closing temperature	12.0°C 🥖







Bypass Auto/Open/Closed/Set Points





Filters Settings



JSER SETTINGS	
Work modes	>
Rypass	>





Filter Reset Procedure











Filter Reset Procedure (Continued)

2		
ers > Filter change procedu	re	
Supply air filter - Class	Medium class M5	1
Extraction filter - Class	Medium class M5	1
Has filter change been c	completed? No	1

Ļ

 \bigcirc

\$

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A



Supply air filter - Class	Medium class M5
Extraction filter - Class	Medium class M5
↑ ↓	\$



Filter Reset Procedure (Continued)

Filters	
er settings > Filters	
Complete the filter change procedure	No 🧪

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|||

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Filters				
User settings > Filters				
× Con	nplete the filter ch procedure	ange		
	NO			
	YES	\supset		
Confirm				
^		*		
	0	<		

U	ser settings > Filters		
	Start filter change	procedure	No 🧹
	↑	¢.	\$



Cloud App Walkthrough

Create an Account



	ProAirVENT	
	E-mail	
ct App – This o connect	Password	
the world connected to users house	<u>Forgot password?</u> <u>Resend confirmation e-mail</u>	
	Sign in	
	Create account	———— Create Accoun



Create an Account (Continued)







Create an Account (Continued)





Signing in to New Account





Signing in to New Account (Continued)





Signing in to New Account (Continued)





Adding a Device





Adding a Device Manually





Add name of device and the Serial Number of the Device

This is the Internet



Connecting a Device Via Bluetooth















**Internet Connection should be setup following instructions from Page 20, If this was setup prior to this step the Router and Password detail will appear here











Cloud App Home Screen





Cloud Menu List







Cloud Device Parameters

Device Parameters – User Settings – Allows the user to access some Parameters – Refer to Page 31 for overview of all control setting Menus





Cloud Charts





Gives a full log of the hardware Status and readings, full date search and choice of hardware to view



Cloud Alerts/Notification





Cloud Installation Settings/Contact Details





Installation Settings – For the User to add in contact details – (this is fully confidential)



Cloud Home Tile Settings

Unit Mode – This can be switched between manual and schedule mode,

Manual runs the system at a set fan speed, Scheduler allows the user to setup different speeds on a 24/7 calendar

Auto – When activated the system will increase and decrease depending on the Co2/Humidity conditions the ventilation system reads

Party Boost Mode – The user can enable this feature if there is a big gathering in the house to keep the air fresh and clean – this is a timed boost (Default 3 hours)



Bypass – The user can open (On) or Close (Off) the bypass manually or leave it in Auto mode to open and close automatically

Current Mode – There are 3 speeds, Base is the ideal running state, Compliance is used for Validation, Boost is the high end speed to remove any extra condensation created by showers

Boost – The user can enable this boost on the app or via the Wireless switches fitted in the house (Default 15mins) ideally used when there is a shower being used



Cloud Schedule







Cloud Bypass







Cloud Auto




Cloud Current Mode

\leftarrow	1005	I	Ξ	
	Manual		Auto	
ι	Jnit mode		Bypass	
	\bigcirc	(\mathbf{i}
	Auto		Current mod	e
	Ŷ			
Party	y Boost mode		BOOST	
	111	0	<	





Cloud Party Boost





Cloud Boost







ProAir Cloud Dashboard Overview

ProAir Cloud Dashboard - <u>www.proairventconnect.ie</u>

The ProAir Cloud Dashboard can be also be accessed on a laptop via a browser (Chrome, Edge, Firefox etc) the layout resembles the same as the ProAirVent Connect Phone App, **only accessible if the system is connected to the router and is receiving an internet connection





Modbus/BMS Table

The following table provides a complete list of the controller's Modbus parameters.

BMS index	Modbu s address	Variable name	Description	Signal type	Min.	Value Max.	Dom.	Variable type	Comments
1	0	Program version	Program series	0	0	0xFFFF	1	hex	
2	1	-	-	-	-	-	-	-	
3	2	STATUS_OK	Status of work	0	0	1	0	integer	
4	3	AWARIA	Failure status	0	0	1	0	integer	
5	4	WORK_MOD E	Controller work run	I/O	0	6	0	integer	3 – run1, 4 – run2, 5 – run3,
6	5	Tmain	Lead sensor	Ο	0	2	0	integer	0 – extraction sensor, 1 – supply sensor, 100 – panel sensor
7	6	Tsup	Supply air temperature (T1)	0	-40.0	60.0	0.0	integer	999 – if sensor failure



8	7	Texh	Extraction air temperature (T2)	0	-40.0	60.0	0.0	integer	999 – if sensor failure
9	8	Tinl	Intake/exhaust air temperature (T3)	0	-40.0	60.0	0.0	integer	999 – if sensor failure
10	9	Tout	Exhausted air temperature (T4)	0	-40.0	60.0	0.0	integer	999 – if sensor failure
11	10	Trec	Ground heat exchanger (GWC) temperature (T15)	О	-40.0	60.0	0.0	integer	999 – if sensor failure
12	11	Theat	Temperature after secondary heater (T16)	0	-40.0	60.0	0.0	integer	999 – if sensor failure
13	12	Tpanel	Main panel temperature	0	-40.0	60.0	0.0	integer	999 – if sensor failure
14	13	Q1-limit	Air quality sensor (Q1-0/1)	0	0	1	0	integer	0 – contact open 1 – contact closed
15	14	-	-	-	-	-	-	-	
16	15								
17	16								
18	17	BYPASS	Bypass actuator state	0	0	1	0	integer	$\begin{array}{c} 0 - \text{flow off,} \\ 1 - \text{flow on} \end{array}$
19									



20	19	IN1	IN1 external signal	0	0	1	0	integer	0 – inactive, 1 – active
21	20	IN2	IN2 external signal	0	0	1	0	integer	0 – inactive, 1 – active
22	21	ECO	ECO external signal (control panel)	0	0	1	0	integer	0 – inactive, 1 – active
23	22								
24	23								
25	24								
26	25								
27	26								
28	27								
29	28								
30									
31	30								
32	31								
33	32								
34	33	Mode_OUT	OUT mode	I/O	0	1	0	integer	0 – inactive, 1 – active
35	34	Mode_PART Y	PARTY mode	I/O	0	1	0	integer	0 – inactive, 1 – active
36	35								
37	36								
38	37								
39	38	-	-	-	-	-	-	integer	
40	39	Temp_USER1	Setpoint temperature in run 1	I/O	8	30	20	integer	Unit: °C



41	40	Temp_USER2	Setpoint temperature in run 2	I/O	8	30	20	integer	Unit: °C
42	41	Temp_USER3	Setpoint temperature in run 3	I/O	8	30	20	integer	Unit: °C
44	43	W1	Supply fan, current control	Ο	0	100	0	integer	Control in %
45	44	W2	Extraction fan, current control	0	0	100	0	integer	Control in %
46	45	W1_EN	Permission to operate supply fan (W1)	0	0	1	0	integer	0 – inactive, 1 – active
47	46	W2_EN	Permission to operate extraction fan (W2)	0	0	1	0	integer	0 – inactive, 1 – active
49	48	Speed_W1_U SER1	Speed W1 in run 1	I/O	dyn. (15)	dyn. (100)	30	integer	Control in %
50	49	Speed_W1_U SER2	Speed W1 in run 2	I/O	dyn. (15)	dyn. (100)	50	integer	Control in %
51	50	Speed_W1_U SER3	Speed W1 in run 3	I/O	dyn. (15)	dyn. (100)	75	integer	Control in %
52	51								
53	52								
54	53								
55	54	Speed_W2_U SER1	Speed W2 in run 1	I/O	dyn. (15)	dyn. (100)	30	integer	Control in %



56	55	Speed_W2_U SER2	Speed W2 in run 2	I/O	dyn. (15)	dyn. (100)	50	integer	Control in %
57	56	Speed_W2_U SER3	Speed W2 in run 3	I/O	dyn. (15)	dyn. (100)	750	integer	Control in %
58	57								
59	58								
60	59								
61	60								
62	61								
63	62								
64	63								
65	64								
66	65								
67	66								
68	67	-	-	-	-	-	-	-	-
69	68								
70	69								
71	70								
72	71								
73	72								
74	73								
75	74	BMS_address	Device address for BMS communication	О	0	247	1	integer	
76	75	-	-	-	-	-	-	-	
77	76	BMS_change_ en	Changing settings from the BMS	0	0	1	1	integer	0 – off, 1 – on



78	77	BMS_STOP_e n	START_STOP from the BMS	0	0	1	1	integer	$\begin{array}{l} 0 - \text{off,} \\ 1 - \text{on} \end{array}$
79	78	-	-	-	-	-	-	-	
80	79	UID1	UID – characters 1 and 2	0	12336	23130	-	ASCII	
81	80	UID2	UID – characters 3 and 4	0	12336	23130	-	ASCII	
82	81	UID3	UID – characters 5 and 6	0	12336	23130	-	ASCII	
83	82	UID4	UID – characters 7 and 8	0	12336	23130	-	ASCII	
84	83	UID5	UID – characters 9 and 10	0	12336	23130	-	ASCII	
85	84	UID6	UID – characters 11 and 12	0	12336	23130	-	ASCII	
86	85	UID7	UID – characters 13 and 14	0	12336	23130	-	ASCII	
87	86	UID8	UID – characters 15 and 16	0	12336	23130	-	ASCII	
88	87	UID9	UID – characters 17 and 18	0	12336	23130	_	ASCII	



89	88	UID10	UID – characters 19 and 20	0	12336	23130	-	ASCII	
90	89	UID11	UID – character 21	0	48	90	_	ASCII	The younger byte is a character, the older byte is skipped
91	90	-	-	-	-	-	-	-	
92	91								
93	92								
94	93								
95	94								
96	95	-	-	-	-	-	-	-	-
97	96	-	-	-	-	-	-	-	-
98	97								
99	98								
108	107	-	-	-	-	-	-	-	-
109	108								
110	109								
112	110								
113	112								
114	113								
116	114								
117	116								
118	117								
119	118	PSA_W1	Supply fan start level	I/O	dyn. (15)	dyn. (100)	25	integer	Control in %
120	119	PSA_W2	Extraction fan start level	I/O	dyn. (15)	dyn. (100)	25	integer	Control in %
121	120	-	-	-	-	-	-	-	-
122	121	-	-	-	-	-	-	-	-

