SimpleLink Controller
IOM and Startup Manual

Startup Sequence

Step 1: Connect main power including ground to the main control panel

Step 2: Connect normally-open door switches to the SW-SW terminal strips in the main control panel

Step 3: Connect HMI display to Control Relay Board using the RJ45 cable provided by Marsair

Note: Use screws to mount the HMI display back cover to the wall. HMI display module will clip onto back cover.

Step 4: Turn main power ON and calibrate HMI screen
Note: The screen will lockout every 5 minutes of non-use. Default password to unlock the screen is “0000”

Main Menu

Emergency ON/OFF
This will toggle between ON-OFF. In OFF position, the air curtain will always be OFF. In ON position, the air curtain will operate in the selected preset mode.

Summer/Winter Selector Switch
In Winter position, the internal thermostat will cycle the heat. In Summer position, controller will permit fan operation only.

Fan Speed
Fan speed dial adjusts fan speed. Number of fan speed increments depend on the type of air curtain and accessories. Lowest fan speed is factory set for appropriate heat dissipation.

Heat Setting
Heat speed dial adjusts heat output. Hi-Lo heat setting is standard on most electric heated air curtains.
**Status**
For heated units, the blue Fan icon will come ON when the fan is ON and both Heat an Fan icons will come ON when both heat and fan are ON.

**Actual Inside Temperature**
Built in temperature sensor measures and displays intake air temperature. The units can be changed between °C to °F by touching “degC” or “degF” on the screen.

**Set Point Temperature**
User set point temperature decides to turn the heat ON if set point temperature is below the actual inside temperature. Touch the screen at set point temperature to set desired value. Desired value can also be set from the “Program” menu.

**Reset icon**
The red reset icon reminds the user for periodic air curtain service such as cleaning or changing filters or to clean any dust build up inside the air curtain housing using a damp cloth.

The red reset icon will come ON during startup which should be reset. The red reset icon will also come ON after 6 months of operation (or) 840 hours of cumulative operation, whichever comes first.

**To reset or remove the red reset icon** –
1. Go to program menu
2. Go to service button
3. Click clean button

**Preset Modes**

- Time Delay Mode
- Eco Mode
- Smart Delay
- Heat on Demand
- Smart Control
- Heat on Demand Eco
- Time Delay Mode
- Eco Mode

Exit
**Time Delay Mode**  
This will be the default mode that should be selected.  
The default time delay is 5 seconds.

*The time delay can be changed by –*
1. Going to program menu  
2. Push Time Delay button  
3. Set desired time delay  
4. Hit save

**Eco Mode**  
In this mode, the fan speed will automatically be set at medium speed and for heated units, heat will be set to low heat. This mode is to reduce energy consumption due to air curtain operation.

The fan speed can be changed from the main menu by pushing the fan speed dial.

**Smart Delay**  
In this mode, the time delay will automatically set based on the ON-OFF cycles.  
Note: The fan speed will be frozen to what the setting was prior to selecting this IQ delay mode.

**Smart Control**  
Available only with Plus Package. In this mode, both the Fan Speed and Heat output will automatically set based on inside and outside temperature. Time delay will also automatically set based on door traffic.

**Heat on Demand**  
In addition to providing thermal separation, heated air curtain behaves like a space heater in this mode.  
When the doors are closed and if the space temperature gets below the set point temperature, both fan and heat turns ON.

**Heat on Demand Eco**  
Same as above but when the air curtain is acting as a space heater, the fan speed and heat will be in low setting to reduce power consumption and to minimize sound.
Program Menu

Note: most of the buttons in program screen are self-explanatory. Here are few of the screens that might need additional explanation.

Schedule
Used to schedule the air curtain operation for the entire week

Service
Clean/replace filter or regular periodic maintenance. Used to remove the red reset icon from the main screen.

This will lock the screen for 30 sec. Used to clean the display without inadvertently pushing any button.

Used to check the status of the temperature sensors and door switch for troubleshooting.

Not applicable in this release. To be used for any future software updates via WIFI link.
Main Screen

**Note**: The screen will lockout in about 5 minutes of non-use. The password to unlock the screen is “0000”

**Emergency ON/OFF**
This will toggle between ON-OFF. In OFF position, the air curtain will always be OFF. In ON position, the air curtain will operate in the selected preset mode.

**Manual/Automatic**
Similar to our current unheated panel, in Manual or Hands mode, the fan will be always ON. In Auto Mode, the air curtain will be ON only when the doors are open.

**Fan Speed**
For the QP unit, there will be 9 speed increments since this drives the VFD. For all other units, this will be 3 speed increments since it directly drives the 3-speed motor.
**Status**
For unheated units, the blue Fan icon will come ON when the fan turns ON and the icon will disappear when the fan is turned OFF. Similarly, for heated units, the blue fan and heat status icons will come ON depending on the fan and heat status.

**Reset icon**
The red reset icon reminds the user for periodic air curtain service such as cleaning or changing filters or to clean any dust build up inside the air curtain housing using a damp cloth.

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**Preset Modes**

![Preset Modes Menu]

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