

LEIGH TEC SYSTEMS MANUAL



Ventilation System Operation & Maintenance



Suppliers of:

DAIKIN **FUJITSU** **TOSHIBA**

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Section A - Safety

CAUTION!

The control panel contains no user serviceable parts
Only qualified electrical engineers should carry out the installation or maintenance of the control panel.

Failing to follow these instructions may result in fire or serious injury.

CAUTION!

Do not allow lint, paper, wood chips, dust, metallic chips or other foreign matter to enter internal enclosure of the panel.

Otherwise fire or an accident could occur.

Basic Connection

- (1) Be sure to connect the power cables to main circuit power terminals L1, L2, L3 and N or L, N, if 1ph of the panel. If the power cables are connected to other terminals damage to the panel will occur. Also check the source voltage for the allowable voltage range specified 400v ac 3ph 230v 1ph.
- (2) Connect the grounding terminal according to national or local regulations to prevent electric shock, fire or other accidents and to reduce electrical noise.
- (3) Use reliable crimp terminals for connection of cables to all terminals.
- (4) After finishing wiring, check the following.
 - a. Check if the cables are connected correctly.
 - b. Check if there is no failure of connection.
 - c. Check if terminals or cables are not short circuited or there is a ground fault.
- (5) Any changes to connections within the panel after the panel has been turned on, note that the smoothing capacitors in the inverters take time to be discharged after they are turned off. To avoid danger, allow time for the inverters to discharge fully.

Section B - Equipment Supplied

UV Canopy

Extract Filters

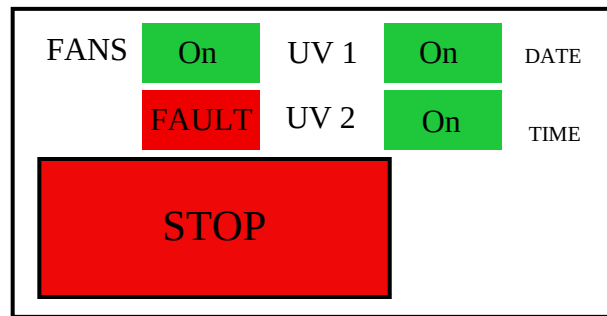
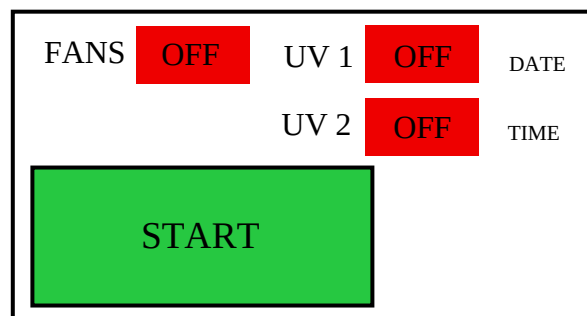
Canopy

Baffle Filters 395mm x 395mm x 45mm Stainless Steel Type Complete With Mesh

Section C - Control Panel Operation

Main Screen & Start Stop

Operation of the control panel is via Start and Stop buttons on the canopy mounted touch screen as shown in pictures below.



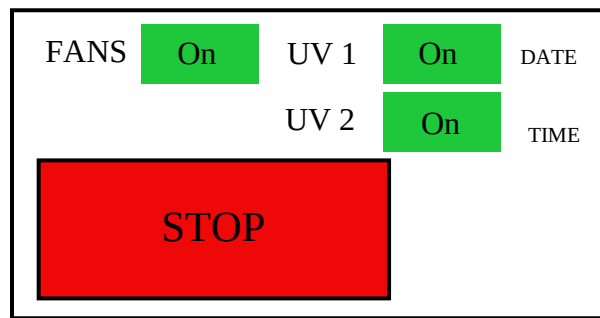
Pressing the start button will start the UV system for the canopy.

Pressing the stop button will disable the UV immediately.

Please note in case of fire leave the building by the main exit and disable the ventilation system by means of pressing the stop button.

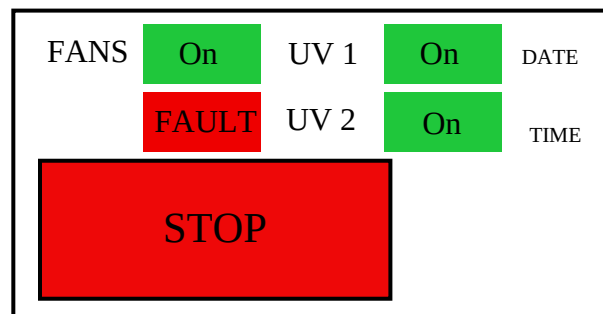
Normal Running

In normal running condition this is the screen that will be displayed.



Faults

In the event of a fault a red button will appear on the touch screen, pressing the fault button displays the



Fire Alarm

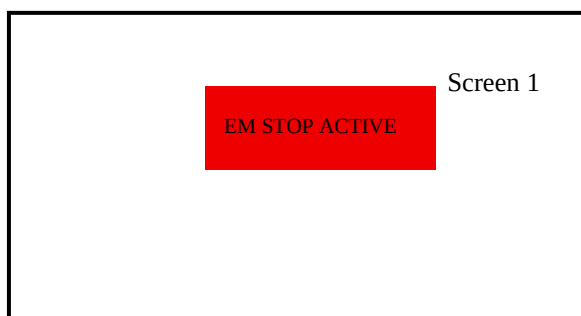
Fire alarm active will initiate a full shut down.



check the operation of the fire alarm, once the problem is rectified the fault on the screen will clear automatically and normal operation will resume.

Emergency Stop

Emergency Stop active will initiate a full shut down



If the above screen is shown the panic stop button on the front of the vent panel has been activated if this is the case it can be re-set by twisting the button in an anti-clockwise direction until it pops out. Once re-set the screen will clear automatically and normal operation will resume.

Air SW Fail

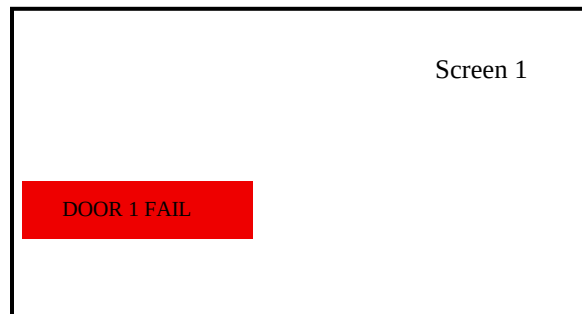
The Air pressure switch will stop the use of UV, the UV requires extract air from the canopy.



Check the operation of the extract fan or any faults with the pressure switch, the UV requires extract air from the canopy.

Door 1 Fail

One of the two UV rack access doors is open or not closed correctly, in section 1 of canopy the UV will not operate in this section of canopy.



If the above screen is shown ensure the doors are fully closed, once the doors are closed the fault on the screen will clear automatically and normal operation will resume.

Door 2 Fail

One of the two UV rack access doors is open or not closed correctly, in section 2 of canopy the UV will not operate in this section of canopy.



If the above screen is shown ensure the doors are fully closed, once the doors are closed the fault on the screen will clear automatically and normal operation will resume.

Filter Fail 1

One or more of the canopy baffle filters are removed or not seated correctly in section 1.



If the above screen is shown refit the filters, once the filters are closed the fault on the screen will clear automatically and normal operation will resume.

Filter Fail 2

One or more of the canopy baffle filters are removed or not seated correctly in section 2.



If the above screen is shown refit the filters, once the filters are closed the fault on the screen will clear automatically and normal operation will resume.

Control Panel Maintenance

The control panel contains no user serviceable parts

Only qualified electrical engineers should carry out the installation or maintenance of the control panel.

1. Check annually that all wiring connections are secure.
2. Check operation of unit, including emergency stop system.

Section D - Ventilation Canopy

CANOPY CLEANING

There are no grease filters that are 100% efficient, consequently there will always be a certain amount of grease carried through the filters matrix and deposited on the internal surfaces of the canopy filter housings and connecting ductwork. Grease quantity carried through the filtration system will depend on the type of cooking. If cleaning is not carried out regularly, grease on the inside surfaces of the canopy will create both hygiene and fire risks. For these reasons it is necessary to have a deep clean operation carried out on a six-monthly cycle and even three-monthly in heavy cooking environments.

LTS canopies are designed to be easily cleaned and will remain in pristine condition if the correct cleaning procedures are followed. Washing the canopy with soap or mild detergent and warm water and placing the filters through a pot wash carried out weekly will usually suffice however for heavy cooking processes this procedure should be carried out twice too four times weekly. Please note that when wiping down the canopy try and wipe following the natural direction of the grain in the stainless steel, this will enhance the appearance and prevent scratching. If these procedures are not followed grease can build up and become baked on requiring costly specialist attention.

Deciding upon when cleaning should take place and how often, is mostly subjective and responsibility is ultimately with the owner/manager of the facility. Regular inspections are recommended and should cover both the internal and external canopy surfaces. As a very rough guide to cleaning schedules please refer to the tables on the following page.

	Description
Light	Pub & Bar Food, small cafes, coffee/tea shops.
Light/Medium	Government institutions (schools/hospitals/elderly person's homes), office and workplace kitchens.
Medium	Italian/French restaurants, hotel restaurants, family pub restaurants, pizza restaurants, supermarket restaurants.
Medium/High	Small low output fast food restaurants, steak houses, kebab/chip shops.
High	Large, high output fast food restaurants, Mexican restaurants, Oriental & Asian restaurants.
Very High	Food factories.

The cleaning cycle for a canopy and its components will depend not only upon the regularity and duration of cooking below but also upon the type of cooking. The following table gives an indication as to how often certain types of installation should be cleaned:

Filter type			Usage	Category		
	Light	Light/Medium	Medium	Medium/High	High	Very High
Baffle filter wash cycle	7 Days	7 Days	5 Days	3 Days	1 Day	1 Day
Canopy clean down	7 Days	7 Days	5 Days	5 Days	5 Days	4 Days
Carbon filter replacement*	12 months	12 Months	6 Months	5 Months	3 Months	3 Months
U.V. Tube replacement*	10000 Hrs	10000 Hrs	10000 Hrs	10000 Hrs	10000 Hrs	10000 Hrs
Grease drawers clean	7 Days	7 Days	5 Days	3 Days	1 Day	1 Day
Ductwork clean**	12 Months	12 Months	8 Months	6 Months	4 Months	3 Months
Note! Regular visual inspection should be carried out on all components. * Where fitted. **If there is U.V. in system, increase cleaning interval by 2 times.						

Cleaning and maintenance of kitchen canopies and associated items should only be carried out by suitably skilled and trained operatives, in the absence of such operatives a specialist sub-contractor should be engaged and retained for the purpose. If in-house staff members are to be used, they will require training in monitoring, testing and handling of the various components. In the case of specialist odour removal systems such as UV, ESP or Carbon Cells, a specialist contractor should always be employed.

Handling components

When handling any components of the canopy, it is imperative that operatives wear proper PPE, gripping cut-resistant work-gloves for protection against metal edges and eye protection as detergents and cleaning agents are used, it is easy to cut skin and damage eyes during the cleaning process. Suitable gloves, eye protection & PPE can be obtained easily through most suppliers of personal protective equipment (PPE). Access to filters for removal & replacement will often mean reaching above head height and as such, suitable access equipment and or safe working procedures are required.

Baffle filters

Remember!

LTS ventilation canopies have been specifically designed for use with baffled grease filters, this system provides an efficient air flow and grease removal from the products of combustion they are also essential for fire safety.

Do not run the ventilation system without the baffle filters fitted if you require additional filters for maintenance reasons contact us and we will provide them at reduced cost to existing customers.

Standard baffle filter removal

Standard baffle filters can be removed from the underside of the canopy by gripping the filter with gloved hands and pushing it upwards when the bottom of the filter has cleared the ledge of the extract aperture it can then be swung out of the canopy towards yourself taking care to support the weight of the item when it comes out. The unit can then be cleaned in your dish washing machine and replaced by a repeat process. **(It is recommended that gloved hands are used for this process)**

Lighting Maintenance

Ensure power supplies to the lights are isolated before removing covers for maintenance as serious injury could occur!

LTS canopy lights use Eco friendly LED units, all of the internal parts can be accessed by removing the toughened glass light diffuser. This is done with the use of either a 4mm Allen key.

Cleaning

LeighTec recessed vapour proof light should be cleaned while in place using the same method as weekly canopy cleaning.

Handling components

When handling any components of the canopy, it is imperative that operatives wear proper PPE, and be aware that before removing light fittings to isolate them from the electrical supply. Access to lights for removal & replacement will often mean reaching above head height and as such, suitable access equipment and or safe working procedures are required.

It is strongly recommended that an in-house, site specific risk assessment of these hazards should be carried out.

Section F - Q&A

Q No Power to the control panel

A: This is commonly a circuit breaker that has tripped in the main distribution board don't be concerned if this happens it can be caused by a power surge.

Q The control panel powers up, but the system fails to start?

A: Check that none of the Emergency Stop buttons have been activated if this is the case they can be re-set by twisting the button in a anti clockwise direction, The LCD screen on the control panel will also display a message in this situation to tell you the emergency stop system has been activated.

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