

EGIP

READ ME

ABOUT THESE INSTRUCTIONS

The EGIP system must be installed in accordance with these installation instructions. Failure to do so may result in damage to the unit, injury or even death.

Please ensure all pages are read prior to attempting installation or calling our technical team. Ta.

Siting the main panel.

Firstly choose a suitable mounting position for the control unit, mount the unit away from sources of extreme heat, ensure the panel is located in a position where mechanical damage is unlikely and where it can be easily accessed for use and maintenance.

Fix the panel using the marked enclosure holes only, take care not to damage the internal wiring or PCB of the unit when drilling.

Field wiring

Output terminals to the gas valve carry mains voltage (230v ac nominal). APS, fire, Estop, auxiliary, gas pressure switch and early warning interlock wiring is 24v DC.

The current edition of the IEE Wiring Regulations should be strictly adhered to, wiring and connections should be made by a suitably qualified electrician or competent person.

Intelligas recommends the use of FP200 or similar type of wiring for the mains, fixed wiring installation.

Any CO2 detectors should be wired in a flexible, small core cable. Cat 5 data cable or telephone cable is not suitable. Burglar alarm cable is preferable.

Please follow the first fix wiring schedule set out below

From spur to panel - 2 core + earth 1.5mm²

From panel to gas valve - 2 core + earth 1.5mm²

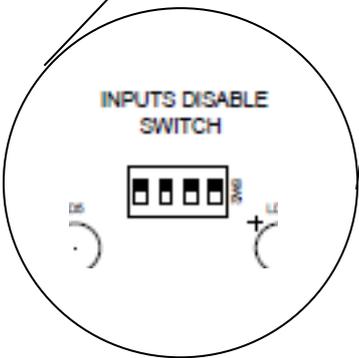
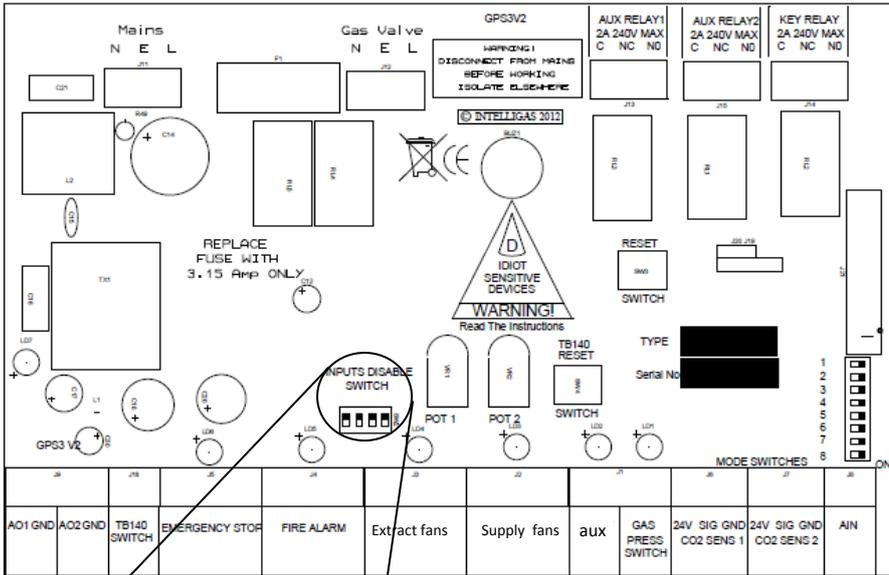
Air pressure switch or fan interlock device - 2 core 1.0mm²

Emergency stop switches - 2 core 1.0mm²

Gas pressure switch (if fitted) - 2 core 1.0mm²

Gas detectors - 6 core alarm cable per detector (only 3 cores used)

Do not make or break connections to the pcb while the mains is connected

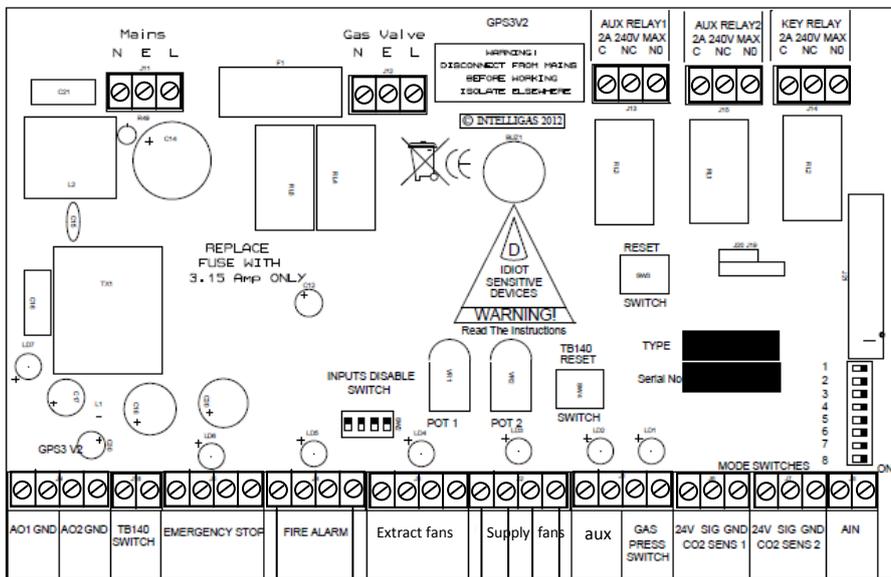


Rather than having to make up countless links, the various interlock inputs can be disabled using the “inputs disable switch”.

The disable switches correspond to the input terminals e.g. switch 1 controls the Estop input. Switch 2 controls the fire alarm input and so-on.

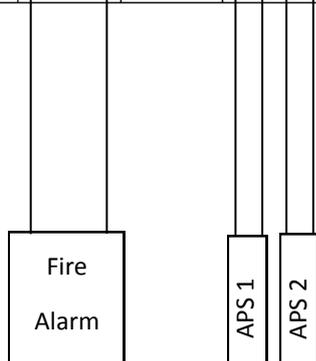
If the fire alarm input isn't being used then push the second switch up, this will disable that input. Each input has 2 pairs of terminals. See below on how to connect these inputs when in use.

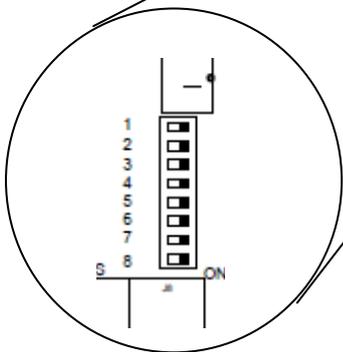
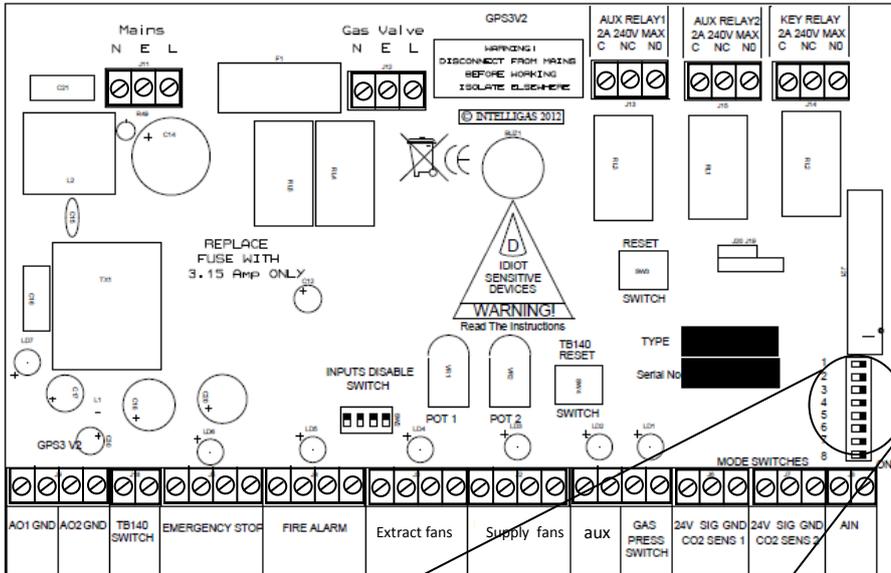
Set up these switches first in accordance with how the system will be installed.



In this example the emergency stop and auxiliary inputs have been disabled on the switches. Only 1 fire alarm input is being connected as are 2 air pressure switches.

As shown below, if only 1 external device is being connected to the input then use the outer terminals as shown in the fire alarm connections, if 2 devices are to be connected then connect using both sets of terminals as shown with the fan switches.





All Intelligas products are designed to be as flexible and adaptable as possible. We realise that site conditions can vary, even temporarily.

These switches can turn certain parts of the software on and off and therefore should be used carefully. Below is a list of what the switches do.

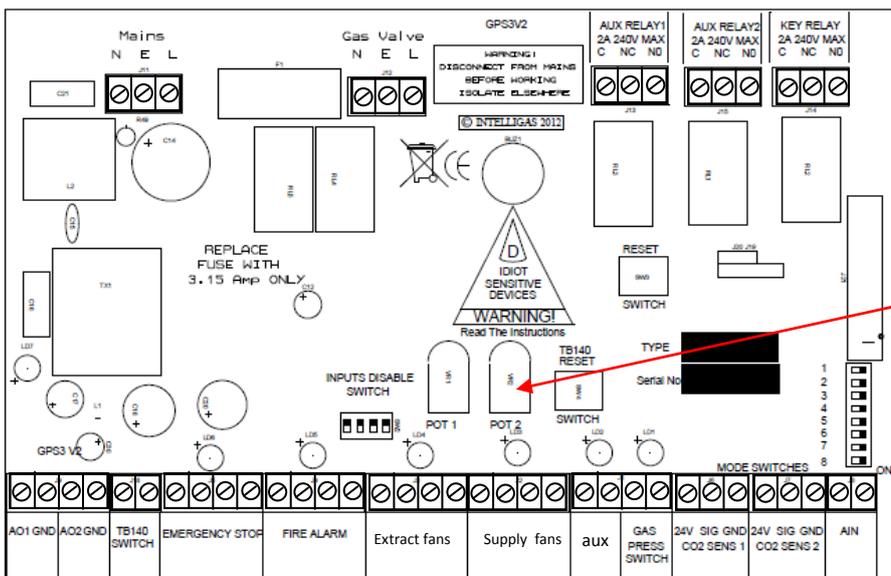
- Switch 1 on - gas purge time 6 seconds
- Switch 1 off - gas purge time 3 seconds
- Switch 2 on - gas prove time 60 seconds
- Switch 2 off - gas prove time 30 seconds
- Switch 3 On - purge and prove time extended (doubled)
- Switch 3 off - purge and prove times as selected on switch 1 & 2
- Switch 4 on - gas sensing on
- Switch 4 off - gas sensing off
- Switch 5 on - 2 x detection inputs are used
- Switch 5 off - 1 x detection inputs are used
- Switch 6 - spare
- Switch 7 on - CO2 fan control 0-10v on (AO2)
- Switch 7 off - 10v on start 0v on off (AO2)
- Switch 8 On - BB100 function off (normal)
- Switch 8 off - BB100 function on

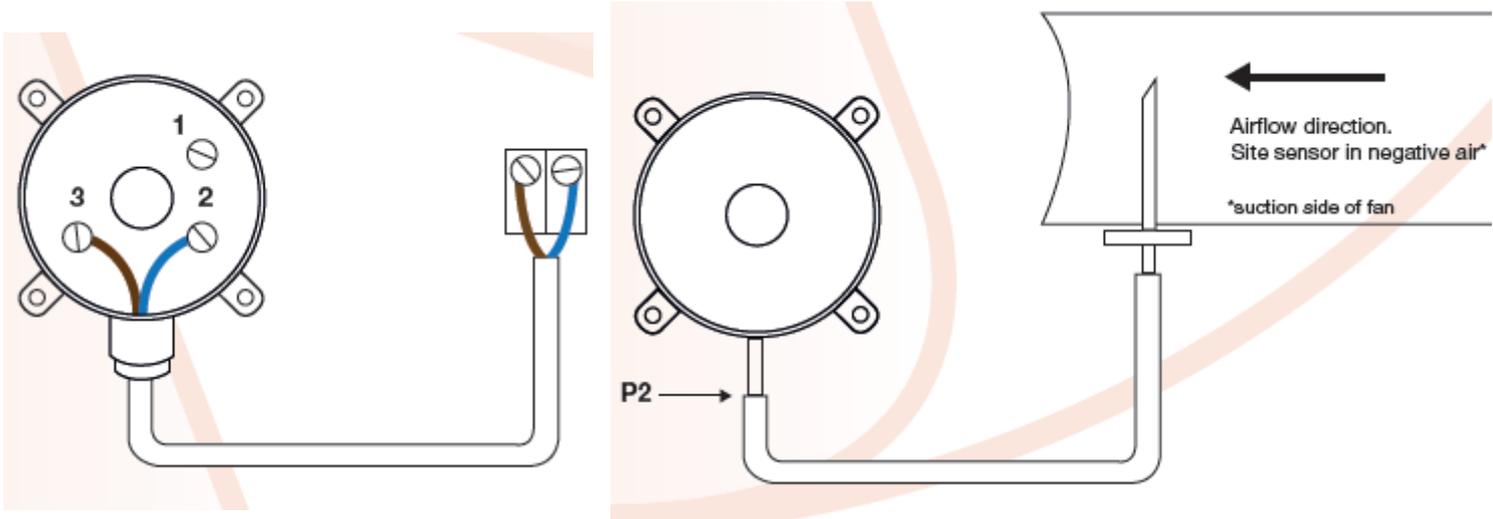
Mounted on the PCB are 2 potentiometers. Pot 1 is currently not used.

Pot 2 can be used to adjust a delay on the auxiliary input.

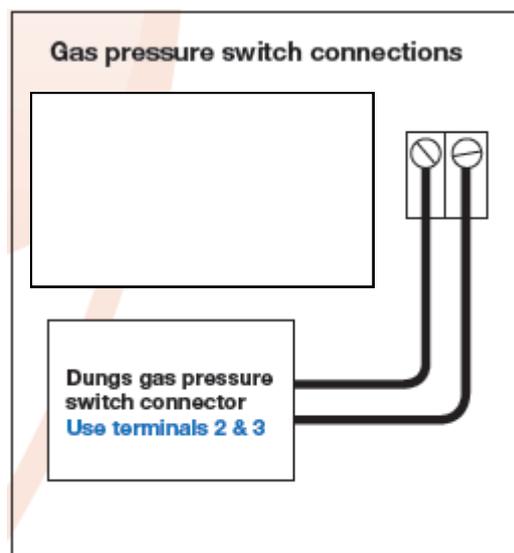
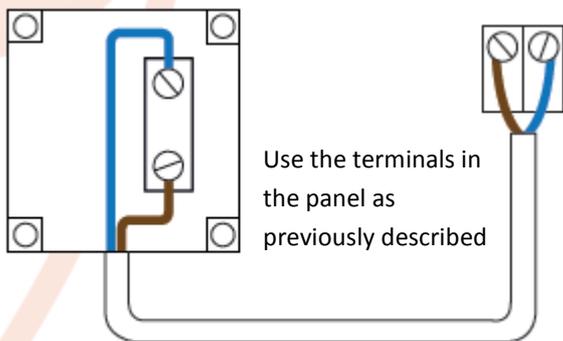
If set at "0" then there will be no delay. If set at 100% then a 4 minute delay will be in operation, the scale is linear between 0 - 100%.

This can be used to provide another set of terminals with anti flutter to facilitate the connection of other fans.



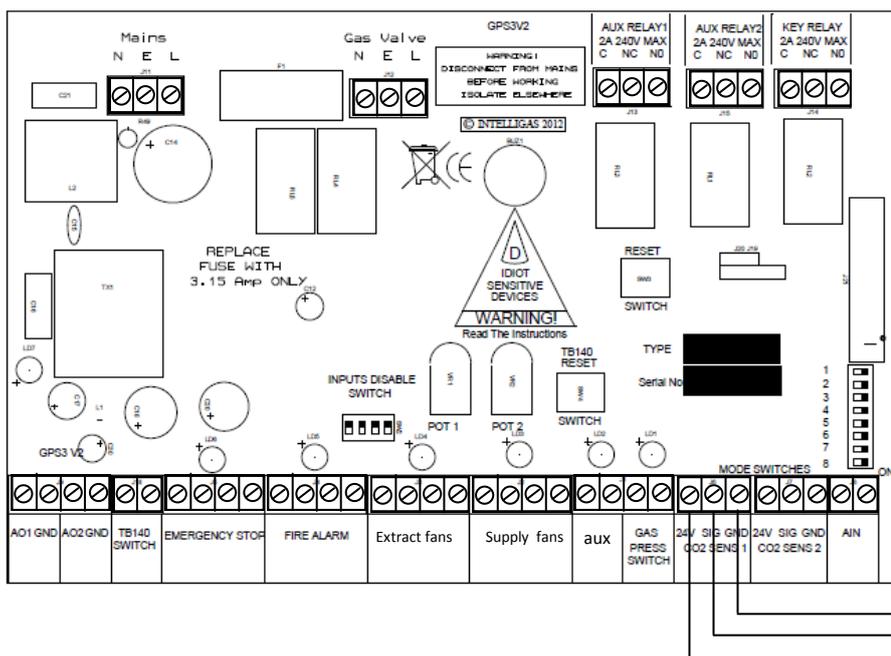


Emergency stop, electrical installation

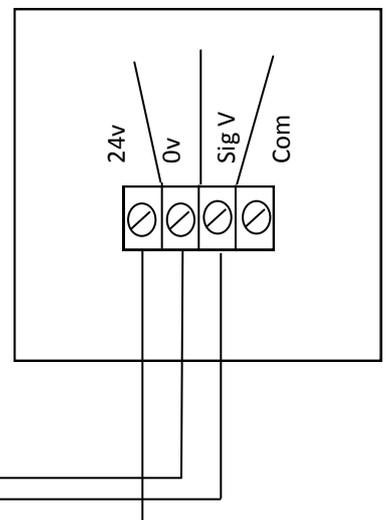


Use the terminals in the panel marked gas pressure switch.

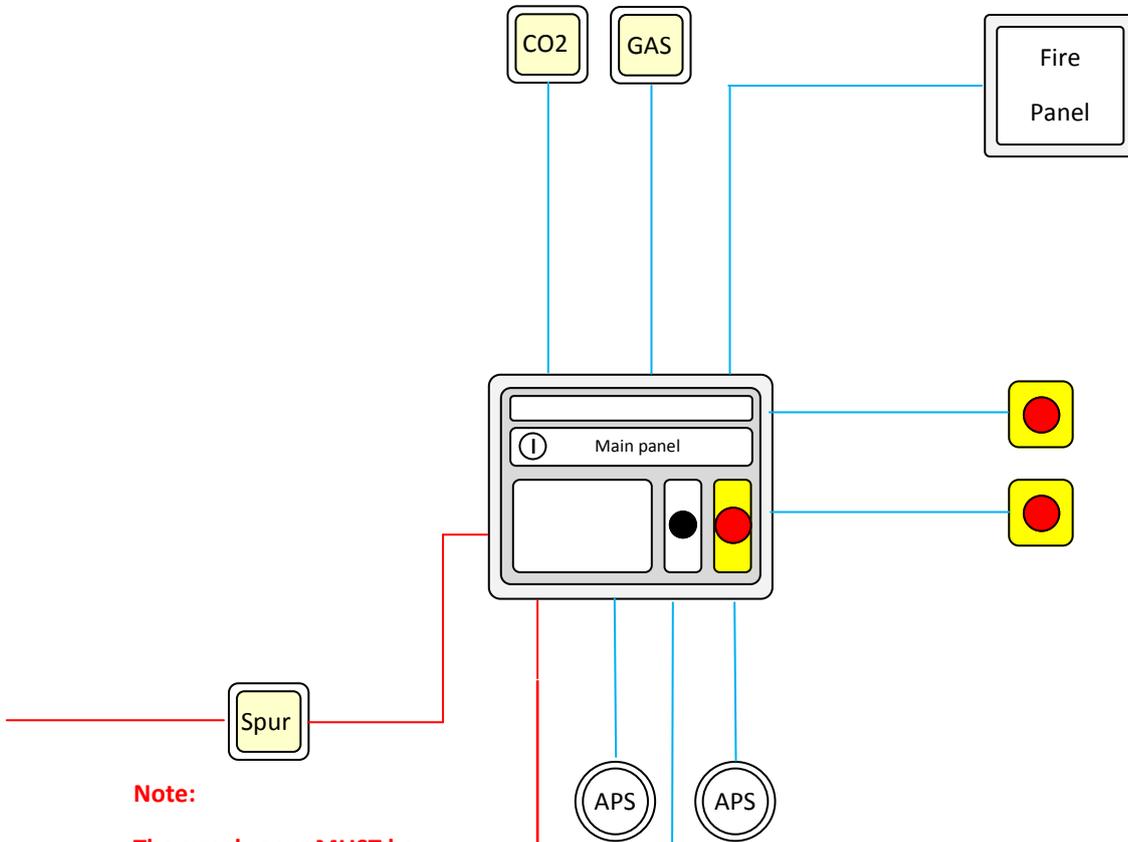
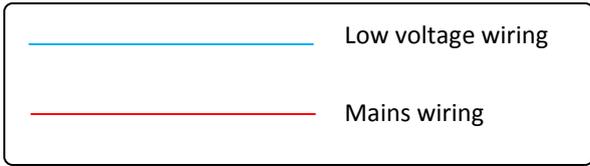
CO2 detector connection



Gas detector (repeat on second if fitted)

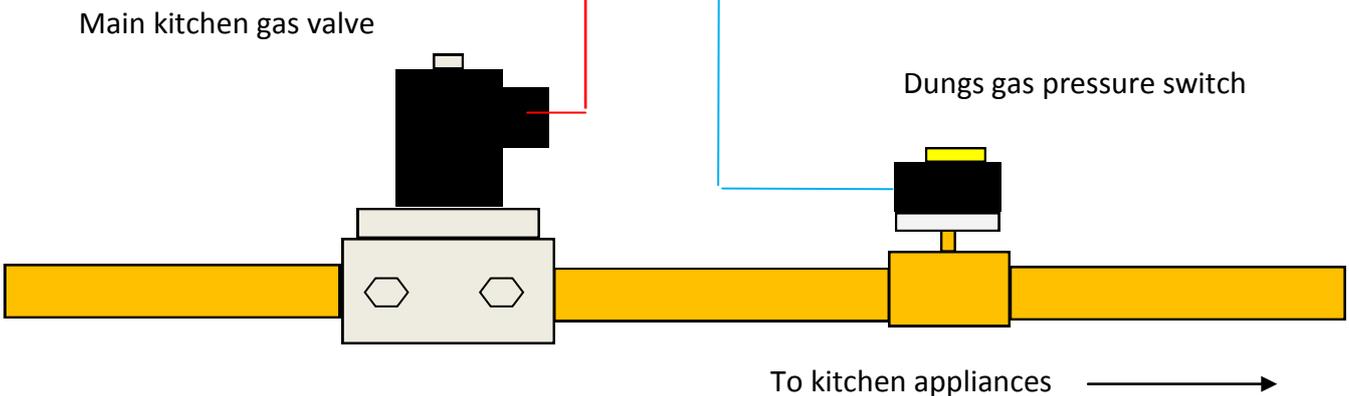


Wiring installation and gas schematic (full proving system, omit dungs gas pressure switch for interlock only installation)



Note:
The supply spur **MUST** be a dedicated supply for the EGIP. Do not supply the fans from the same supply

Gas Schematic



Connection and testing

Prior to power up testing.

Never perform an insulation resistance test on the wiring connected to the panel or the peripheral items. If an IR test is required then this should be performed prior to termination and the cable ends grounded / discharged after the test.

After connecting and testing the operation of all the peripheral equipment, power may then be applied.

A visual check of the interlock LEDs, mounted on the pcb will give an at a glance status of the interlock inputs. Before testing is carried out, ensure that all the LED's (except the early warning) are illuminated

Testing :-

- 1) With the gas solenoid valve closed. Release the pressure in the pipework between the solenoid and the appliances. Check that the gas pressure switch LED goes out. Re pressurise the pipework and ensure the LED comes back on again.
- 2) Operate all the interlock inputs in turn and check that the corresponding LED on the PCB goes out.
- 3) Disconnect the 0-10v output of any connected detector, the panel should flash the red led of the corresponding detector, this is the fault condition. (not available on explosive gas detectors)

Things you should know:-

The gas detectors are active all the time. Explain to the customer that if an amber light is seen on the gas level display then action should be taken. Turn up the ventilation system to maximum etc or isolate the gas supply depending on the type of gas being sensed.

Finishing:-

Ensure that the user guide is passed to the owner along with the keys to the panel.

