

NOTIFIER TECH TIP

AFP2800

0.2.i2 "PANEL GROUND FAULT"

V1.0 CH 14/04/17

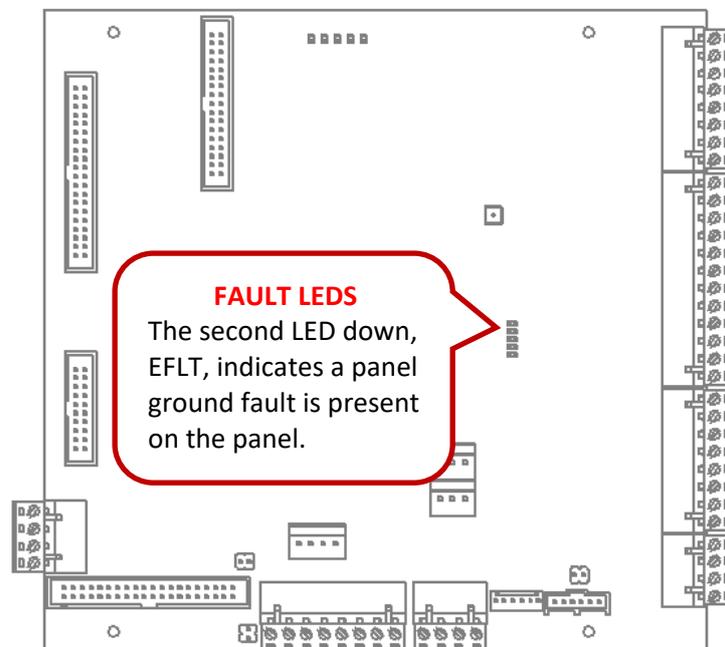
The AFP2800 will detect a PANEL GROUND FAULT, when fitted with an IFS714 or IFS724 version termination card, when leakage to panel ground is detected from any point that directly utilises the 0V or 24V from the panel power supply.

AFP2800 fitted with the earlier IFS704 version termination card do not have this capability and will not report a PANEL GROUND FAULT.

Where enabled, the AFP2800 will display this earth leakage as point ID 0.2.i2 with a description of PANEL GROUND FAULT. The point ID 0.2.i2 simply reflects that earth leakage is present on the panel and does not give an indication of where the PANEL GROUND FAULT is located.

On AFP2800 fitted with IFS714 or IFS724 termination cards, it is possible using the menu system, to disable "Ground Fault Reporting". This prevents the panel from generating a fault condition and also displaying on the main screen, the 0.2.i2 PANEL GROUND FAULT. This is not recommended as a permanent solution and the condition causing the fault should be corrected as soon as possible.

The fault will **ALWAYS** be indicated by the second LED down in the group of five fault/status LED's as shown in the diagram below, whether or not "Ground Fault Reporting" has been disabled via the menu system.



LOOP GROUND FAULTS

Ground faults that occur on the addressable loops report through to the panel as Loop Ground Faults. These are separate to 0.2.i2 PANEL GROUND FAULTS and cannot be disabled via the menu system. In most instances the loops will continue to operate correctly despite the presence of the fault, however the fault needs to be corrected as soon as possible.

FAULT FINDING PANEL GROUND FAULTS

Fault finding and locating 0.2.i2 PANEL GROUND FAULTS is accomplished using a process of elimination to narrow down the cause of the fault.

Initially look for obvious causes such as:

If it has been raining, particularly following an extended period of dry or hot weather, check the Bell or Strobe output, or other devices located externally, which may be constantly exposed to the environment. Simply disconnecting these outputs/devices may show that these are the cause of the leakage.

If it has been raining, check for obvious water ingress into the building or area and if present check for impact on any detection equipment in the vicinity.

Onsite works, these are typical locations where cabling may have been damaged inadvertently.

If not obvious:

Essentially, it will be necessary to remove anything that directly utilises the 0V or 24V from the panel power supply until the PANEL GROUND FAULT clears.

It may be necessary to eliminate all external connections to the panel and leave the “core” components in order to check that these are not the cause of the problem.

If a nurse call system has been connected to the AFP2800 printer port, the ground fault can occur where the RS232 signal ground is referenced to earth in the attached equipment.

POSSIBLE IMPACT OF PANEL GROUND FAULTS

It is possible that if a 0.2.i2 PANEL GROUND FAULT is present on a panel, that damage may result to the CPU or serial ports of the CPU if a laptop is connected whilst the earth fault is present, particularly where the laptop is being powered using a power supply with a 3 pin earthed AC mains plug. It is recommended to check if the second LED down in the group of five fault/status LED's is lit, before connecting to the CPU.

Note: If possible, connect the laptop powered by batteries only, this will help to avoid any possible issues.

If a 0.2.i2 PANEL GROUND FAULT exists, it may make the panel more susceptible to damage during lightning strikes and other electrical events, as the energy seeks to travel to available “earth” points.