AFP-3030 VeriFire® Tools AUS "NFN Gateway" v1.0 CH 11/05/16

VeriFire® Tools is the software suite used to communicate with the AFP-3030 and Noti-Fire-Net for programming, reporting and diagnostics.

When VeriFire® Tools is installed it will install a task that is necessary for it to communicate with related fire system equipment.

It is possible that in some cases this task will clash with other programs installed on the computer, where the computer is also used to interface and communicate with other equipment.

This task is generally run when the computer starts, or when VeriFire® Tools is started if it is not already running. The task will remain running on the computer once VeriFire® Tools is shut down.

The "NFN Gateway" task is shown in the taskbar with the following "double-arrow" symbol when it is running on the computer.



There are numerous ways to prevent the "NFN Gateway" task from running on computer start-up. The following pages show several ways to achieve this and to also shut-down the task once it has been started.

.....

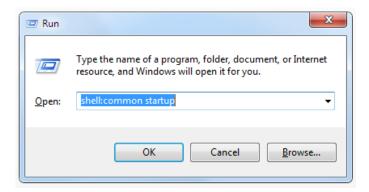
Always exercise extreme care when modifying your system. For further details please contact Notifier Technical Support.

Further Tech Tips and other valuable information can be found in the "Download Centre" located at <a href="https://www.notifier.com.au">www.notifier.com.au</a>

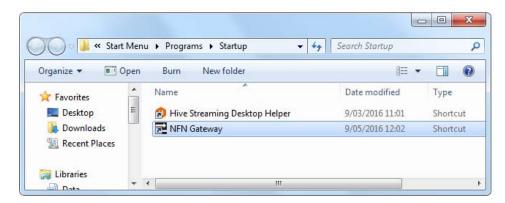
# WINDOWS 7

### Method 1- Preventing Auto Start-up of NFN Gateway task

- Press the [Windows Logo] + [R] keys together on the keyboard
- The "Run" command box should now be open
- Enter shell:common startup and select <OK> or press [enter]



- A window similar to the following should now open
- If a shortcut named "NFN Gateway" exists, right click, and then delete the shortcut from the "Startup" folder



- This should prevent the task from starting until VeriFire® Tools itself is started

Method 2 - Preventing Auto Start-up of NFN Gateway task

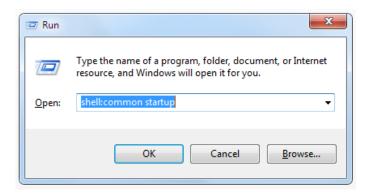


- Navigate to the "Startup" folder by selecting the Windows "Start" button, then select "All Programs"
- Locate and select the "Startup" folder in this list
- If a shortcut named "NFN Gateway" exists in the "Startup" folder, right click, and then delete the shortcut from the folder
- This should prevent the task from starting until VeriFire® Tools itself is started

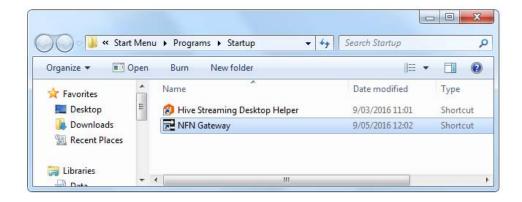
# **WINDOWS 10**

#### Method 1 - Preventing Auto Start-up of NFN Gateway task

- Press the [Windows Logo] + [R] keys together on the keyboard
- The "Run" command box should now be open
- Enter shell:common startup and select <OK> or press [enter]



- A window similar to the following should now open
- If a shortcut named "NFN Gateway" exists, right click, and then delete the shortcut from this "Startup" folder

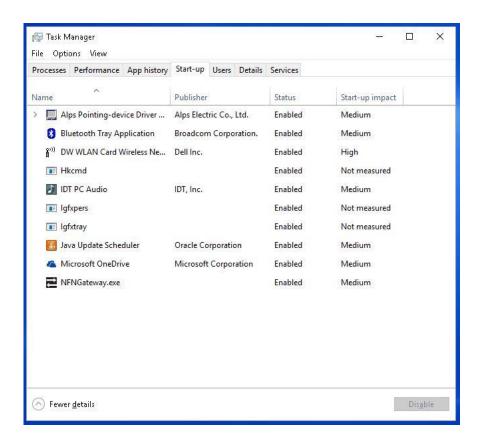


- This will delete the shortcut to the task itself from the "Startup" folder and prevent the task from starting when the computer starts up. When VeriFire® Tools itself is started it will check for the presence of the task and start it automatically if it does not exist.

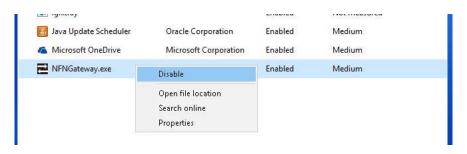
# WINDOWS 10

#### Method 2 - Preventing Auto Start-up of NFN Gateway task

- Startup WINDOWS TASK MANAGER. To do this; Right click anywhere on the taskbar and select TASK MANAGER ..... or ..... Press [Ctrl] + [Shift] + [Esc] together
- Click on the <STARTUP> tab and a list of programs or apps that were installed to run at Windows startup will be displayed
- Any programs or apps that are configured to start will have their status set to "Enabled"



- Simply right-click against NFN Gateway.exe and select "Disable" to stop the task from automatically starting up.



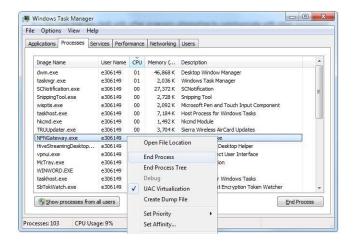
# **ENDING THE "NFN GATEWAY" TASK ONCE IT IS RUNNING**

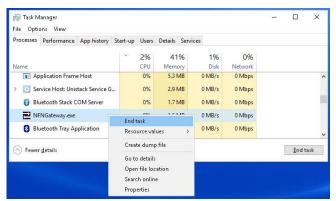
If the NFN Gateway task exists in a "Startup" location or an attempt is made by VeriFire® Tools to communicate with a supported system, it will automatically start a task called "NFNGateway.exe" on the computer and this task will remain running until the computer is shut down or the task is manually stopped.

It is this task that can clash with other programs attempting to communicate with other equipment.

#### To cancel the task;

- Startup WINDOWS TASK MANAGER. To do this Right click anywhere on the taskbar and select TASK MANAGER ..... or ..... Press [Ctrl] + [Shift] + [Esc] together
- Click on the <PROCESSES> tab and a list of processes currently available in the Windows system will appear.
- Locate the process "NFN Gateway.exe" in the list.
- Right-click against the process and select "End Task" or "End Process" depending on the operating system being used.





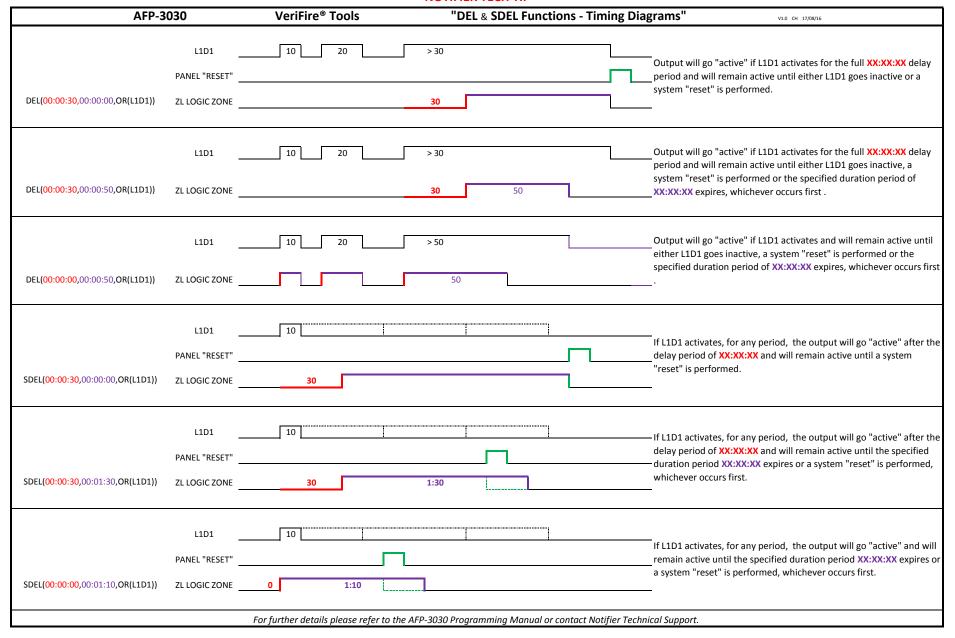
- This will stop the task and it will not start again until VeriFire® Tools is restarted.

# **Notifier Tech Tip**

GENERAL	EOL (End of Line) RESISTOR VALUES	V1.1 CH 01/09/16
OLIVAL		V1.1 CH 01/08/16

# REQUIRE

<b>EQUIP</b>	MENT	<b>EOL VALUE</b>	24VDC	INFO
AFP-28	<u>800</u>			
	FIM OP's, AZF1 & 2 IP's	4Κ7 Ω		PR1 thru PR4, 0.1.Z1, 0.1.Z2
	AZM8 AZF IP's	4Κ7 Ω		AZF1 thru AZF8
AFP-30	130			
	NAC OP's	4Κ7 Ω		NAC1, NAC2
ADDRE	SSABLE FIELD DEVICES			
TODILE	FZM-1	3Κ9 Ω	YES	1 X Conv Zone
	FMM-1	47K Ω	123	1 X Monitored I/P
	FMM-101	47K Ω		1 X Monitored I/P
	FRM-1	-		1 X Relay
	FCM-1	47Κ Ω	YES	1 X 24V Monitored Output
	XP6-MA	3Κ9 Ω	YES	6 X Conv Zones
	XP10-M	47K Ω		10 X Monitored I/P
	XP6-R	-		6 X Relay Outputs
	XP6-C	47Κ Ω	YES	6 X 24V Monitored Output
	7 0 C	1710.22	120	o x 2 x moment ca oatpat
<u>12000</u>				
	SPEAKER	56K Ω		For Single Branch Speaker Circuit Only
	FIP Inputs	DIODE		P6KE10A Band to +VE
	WIP	10Κ Ω		
	WIP/BGA (2-wire)	10Κ Ω & 1Κ2 Ω		
	WIP/ZONE MANNED	10Κ Ω & 4Κ7 Ω		
	STROBE	2Κ7 Ω		
IFS-008	3			
	- AZF's	4Κ7 Ω		
IFS-888	<u>3</u>			
	Outputs, ACF, AZF's	4Κ7 Ω		
IFS-260	00/2400			
	Outputs, ACF, AZF's	4Κ7 Ω		
	outputs, Net , Net 3	71(7.22		
<u>OWS</u>				
	Strobe/Sounder Card O/P	1Κ8 Ω		5Amps Max, IFS-993
	DA-BOWS 100V Speaker O/P	47Κ Ω		
	SDM-4 100V Speaker O/P	47Κ Ω		
DVC				
500	DAA2-5070E Speaker O/P 1-4	20Κ Ω		
	2.1.12 30/02 Speaker 0/1 1 4	201(32		
IFS-200	08 GAS CARD			
	Risk1, Risk2, Risk3, CIE Flt I/P's	4Κ7 Ω		
	Gas Head O/P	4Κ7 Ω		
	Pyro Zone O/P's	1Κ Ω		
	Lock Off / Gas Disch I/P's	4Κ7 Ω		
	Lock Off / Gas Discitly) 3			
	ACF O/P's	4Κ7 Ω		



#### **DA-BOWS**

#### "POWER REQUIREMENTS"

V1.1

The DA Series BOWS (Building Occupant Warning System) is an amplified sound system distributed by Notifier, with models available with output levels such as the DA-30 (30Watt), DA-60 (60 Watt) and DA-120 (120 Watt). These are intended to integrate seamlessly with Notifier equipment and can also be installed in other manufacturer's equipment if required.

#### **RECENT ISSUES**

There have been several recent issues with this equipment, resulting in inadequate or erratic operation of the system. The failure, depending on the rating of the DA-BOWS, has been:

Regular routine maintenance testing of the installed system, which was only for short periods, revealed no apparent problems. However, during extended real-time evacuation drills of buildings, the DA-BOWS operates OK for a short period then begins to operate erratically.

During operation the DA-BOWS may re-boot as evidenced by the LED displays showing flashing similar as to when the system is first powered up.

#### **THE CAUSE**

In all cases the cause of the issues has been that the DA-BOWS have been field installed and connected to an inadequate power supply source, specifically in these cases to one of the two 24V outputs on the bottom edge of the IFS-724 termination card installed in the AFP2800 Fire Panel.

These outputs are rated at 24V @ 1 Amp, which is inadequate to drive any of the DA-BOWS equipment.

#### **DA-BOWS REQUIREMENTS**

The DA-BOWS equipment current requirements at maximum rated output are as follows; DA-30 - 1.8 Amps DA-60 - 3.5 Amps DA-120 - 7.0 Amps

#### **RECOMMENDATIONS**

• Ensure that when installing the DA-BOWS equipment that the power source is capable of supplying the maximum rated output current required by the version of the DA-BOWS being installed.

On the AFP2800 as an example, the DA-BOWS are usually connected directly to the power supply "Panel" output terminals, which are located on the Power Supply Interface (PSI) card, as shown below;



• Ensure that adequate testing is performed during installation/commissioning/modification to verify that the system functions reliably, particularly for a period longer than the system may be subjected to during regular testing.

AFP2800 GENERAL "FAQ 01" v1.1

**Problem:** The Fire Panel displays an isolate that is listed as an "Unknown Point" or "Unnamed Point"

**Solution:** From the keypad select < SERVICE MENU >

then (8) DIAG, VARIOUS DIAGNOSTICS TESTS

then, at the bottom :- DEISOL ALL ISOLATES AND RESET ALL ALARMS then, when asked to "CLEAR ALL ALARMS AND ISOLATES" select "YES"

**Precautions:** As suggested, this will clear all alarms and isolates on the panel, so any existing isolates or

alarms need to be noted and precautions taken. Any other isolates may need to be

manually re-instated into the panel after this solution is applied.

**Problem:** The Fire Panel screen has gone "blank" or "black", however the fire panel appears to be still

functional, as the < EXT BELL ISOLATE > < WARN SYS ISOLATE > < FIRE FIGHTER > and

< SERVICE MENU > keys all operate normally.

**Solution:** Short Term – Reboot the panel, the display MAY return to normal.

Long Term – Check the firmware version installed in the panel (displayed in top left

corner of main FIRE FIGHTER screen). If it is 5.06.80, then it needs to be upgraded to 5.08.81

**Precautions:** This problem only appears to affect a very small number of panels that were supplied,

affected panels will have version 5.06.B0 installed. If an earlier version of firmware is found,

then the problem is unrelated, so upgrading the firmware is not likely to fix the problem.

**Problem:** The Fire Panel utilises Isolate Groups. The trigger point for the Isolate Group is programmed

to be a button from an ACM-16AT annunciator installed in the front panel. This button DOES control the points to be isolated, however it only functions on every second button

push, rather than changing state each time the button is pushed.

**Solution:** The above behaviour occurs when the button assigned to be the Isolate Group trigger

on the ACM-16AT is located in a bank of buttons that has been configured to be

"Toggle ON/Toggle OFF" rather than "Momentary" in operation.

Isolate Groups require a "momentary" type action switch or function to "trigger" the

Isolate Group. The ACM-16AT can be configured so that Bank 1 (Buttons 1-8) or

Bank 2 (Buttons 9-16) can be either "Toggle ON, Toggle OFF" or "Momentary". Dip switches

1 & 2 on the rear of the ACM-16AT configure the banks to the desired mode.

**Precautions:** The MINIMUM time between button pushes, i.e. to "Isolate" then "De-isolate" is 5 seconds.

You can only configure the desired mode per bank of 8 switches, so you must consider this

when assigning functions to buttons.

AFP2800 GENERAL "FAQ 02" v1.0

ALWAYS !! When removing, replacing or changing a detector, always leave the detector removed from the base for at least 15 full seconds. This will ensure that the detector is re-initialised correctly when replaced.

**Problem:** I am trying to connect a LED RIP (Remote Indicator Point) to the DNR addressable Duct

Detectors, however the –RA terminal does not appear to be connected to any internal wiring

on the left hand side of the terminal strip.

**Solution:** If you look closely at the terminal strip, you will see that the –RA terminal and the –COMMS

terminal are actually connected together by a shorting plate as part of the terminal strip, so

there will be no wire on the left hand side of the terminal strip.

**Problem:** What terminals do I use on the LED RIP's (Remote Indicator Points) themselves?

**Solution:** Normally the –D and +R terminals are used, i.e. resistor in use.

(For info, -D represents negative Diode, +D is positive Diode, +R is positive Resistor)

**Precautions:** Do not connect between the –D and +D terminal otherwise damage to the LED may result

**Problem:** I have disconnected the batteries, when I measure across the battery cabling there is no

voltage present?

**Solution:** The charging circuits in the panel "sense" that no batteries are connected, so the battery

output is disabled until the batteries are connected.

**Problem:** I am trying to adjust the voltage on a PSI (Power Supply Interface) style power supply that is

fitted to a panel. The voltage does change, however it seems to lag my adjustment and

always seems to overshoot what I try to set it to.

**Solution:** When adjusting the voltage on the PSI series of supplies, always have the batteries

disconnected. The correct voltage to aim for is between 27.3 – 27.35 VDC. Measure the

voltage across the "Panel" terminals.

**Precautions:** The voltage adjustment may be located near 240VAC terminals on the power supply.

The adjustment is sensitive, make very small changes only.

**Problem:** One battery, part of a pair of a batteries installed into a panel was found to be faulty and

only that battery was changed. The voltages now appear to be correct; however the panel

still fails a battery test.

**Solution:** Batteries should preferably be changed as pairs, unless the "good" battery is fully tested and

the capacity verified.

**Precautions:** When changing batteries as a pair never install a fully charged battery with a fully

discharged one. Battery failure can be premature or life reduced if this is done.

NOTIFIER TECH TIPS									
AFP2800	GENERAL	"FAQ 03"	V1.0						
ALWAYS !!	When performing a "cold boot" on a down completely, leave the panel wi applying power and re-connecting ba	thout power for at least 15 full second	•						
Problem:	The AFP2800 panel configuration is m sounder/strobes or external MCP's are sounder/strobes/external MCP's are r	e THEN added to an existing loop, ho	owever the						
Solution:	Addressable sounders/strobes/extern no "CLIP" modules existed on the loop polling may have started in "FLASHSC communicate.	p when the panel was last restarted,	then module						
	The easiest solution is to "Warm Boot the back of the CPU/Display. The CPU will automatically set the module poll	will detect the "CLIP" only modules							
Problem:	Addressable sounders/strobe modules Program has successfully detected the with a continuous tone and not the D	e devices. The sounders DO operate,							
Solution:	When an Auto-Program is performed	, current addressable sounders/stro	bes are detected as						

Type 5 – Control Outp modules to operate co	m is performed, current addressable sounders/strobes are detected as ut. This must be changed to be Type 9 – Sounder/Strobe for the orrectly. Perform these changes in the PCI Programming tool and or manually from the panel menu against each device if necessary.

Problem:	There is a requirement to install an external buzzer on the panel that mimics the function of the internal sounder, due to the panel being located inside a cupboard or enclosure.
Solution:	There are (2) hidden system points that mimic the internal buzzer operation. For an external buzzer that mimics the internal buzzer use the following script against an XR relay or other output, that is being used to drive the external buzzer:
	XR1 = (0.5.O6 or 0.5.O7) and T3;
	The "and T3" stops the external buzzer sounding on every key press like the internal buzzer
[	

Problem:	Flashscan detector polling & a detector LED forced ON manually from the panel menu, is not indicated on a RIP (Remote Indicator Point) attached to the detector.
Solution:	RIP's are Red LED's and only mimic the operation of the Red LED side of the dual LED fitted in the Flashscan detectors. Hence if the detector is in Flashscan mode, the green LED will flash with polling or when forced ON, which will not mimic to the RIP.
	However, detectors that are operating in CLIP mode, will be flashing the Red LED, so will indicate detector polling and when forced ON.

**Problem:** I am trying to locate a specific detector by isolating all the Code Red, Plant, Security, Doors

etc and then initiating an Alarm on the specific detector, so that the Red LED's turn ON, including any RIP's that are fitted, however, the detector briefly lights the Red LED's, then

changes back to Green as if resetting.

**Solution:** To do this you must do the following:

From Service Menu

Select (6) Global, (1) System, Menu

Then change A/P/F/N Lists Auto Switch to MANUAL

From Service Menu

Select (4) Analog, (2) Status, Loop \_\_\_, Detector\_\_\_, Stop, Test, Alarm

#### THEN DO NOT DO ANYTHING ELSE

The detector LED's will remain RED until you navigate away from or change this screen

Remember to switch the A/P/F/N Auto Switch back to AUTO when finished:

From Service Menu

Select (6) Global, (1) System, Menu

Then change A/P/F/N Lists Auto Switch to AUTO

AFP2800 GENERAL "Flashscan vs CLIP" v1.0

# FLASHSCAN Versus CLIP Loop Protocol

**FLASHSCAN** is a protocol that greatly enhances the speed of communications between analogue intelligent devices. Normally communication is done in a grouped fashion, (10) devices at a time. Under normal operation every device is polled approximately every 6 seconds. If one of the devices within that group has new information, then the panel stops the group poll and concentrates on single points.

**CLIP** (Classic Loop Interface Protocol) is an older protocol that polls every device in sequential order. Most FLASHSCAN capable devices can rollback to function in CLIP mode if required.

#### Each loop on an AFP2800 can support:

159 detector addresses (001 – 159) and 159 module addresses (001 – 159) when in FLASHSCAN mode. 99 detector addresses (01 – 99) and 99 module addresses (01 – 99) when in CLIP mode.

#### Detector protocol is independent of Module protocol i.e. each loop can be polling:

Detectors in FLASHSCAN (001 - 159) and modules in CLIP (01 - 99), or vice versa Modules in FLASHSCAN (001 - 159) and detectors in CLIP (01 - 99).

#### The LED indications on the devices change colour according to the current poll mode:

Detectors polling in FLASHSCAN flash **GREEN**.

Detectors polling in CLIP flash RED.

Modules polling in FLASHSCAN *mostly* flash green, with exceptions.

Modules polling in CLIP mostly flash red, with exceptions.

# The polling mode for detectors and modules is automatically determined when the panel starts or is reset with the "Reset" button SW1 located on the back of the CPU/Display.

If the loop has all FLASHSCAN detectors, then the poll mode for detectors will be set to FLASHSCAN. If the loop has all FLASHSCAN modules, then the poll mode for modules will be set to FLASHSCAN. If the loop has just (1) CLIP type detector present, then the poll mode for detectors will be set to CLIP. If the loop has just (1) CLIP type module present, then the poll mode for modules will be set to CLIP.

#### The current polling mode for detectors and modules can be seen at or "Forced" manually from:

<SERVICE MENU>

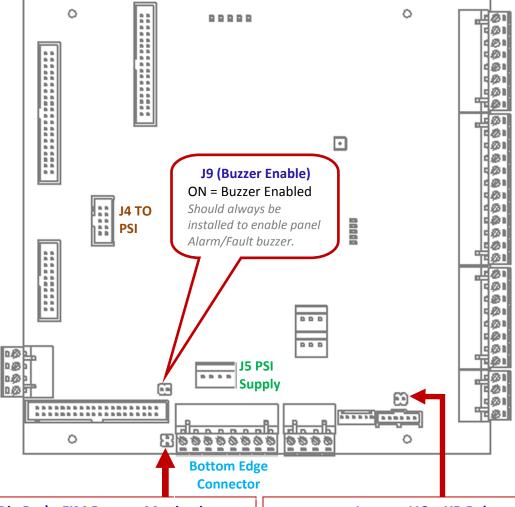
- (4) ANALOG, ANALOG LOOP FUNCTIONS
- (5) LOOP, AUTOPROGRAM & LOOP UTILITIES

Enter Loop No & then use the "TOGGLE" function to set detectors/modules poll mode.

The AFP2800 series is FLASHSCAN/CLIP capable.

The AFP2802 series is CLIP only.

AFP2800 GENERAL "IFS-724 Termination Card Jumpers" v1.3



#### Jumper J6 (Dis-Bat) - FIM Battery Monitoring

**ON** = Disables battery monitoring via IFS-724 FIM Bottom Edge Connector.

**OFF** = Enables battery monitoring via IFS-724 FIM Bottom Edge Connector.

**ON** when Power Supply connects using **J5** (**PSI SUPPLY**) and is being monitored via ribbon cable connected via **J4** (**TO PSI**), as per "Newer" style panels.

**OFF** when Power Supply connects using IFS-724 FIM **Bottom Edge Connector**, usually when older style supplies are still in use, or where IFS-724 has been used to replace older IFS-704, IFS714 FIM cards.

#### POSSIBLE SYMPTOMS if INCORRECT

- Constant 0.2.16 Battery Fault present on panel.
- Intermittent Charger Faults.

Jumper J18 - XR Relays

ON = XR Relays ARE NOT installed.OFF = XR Relays ARE installed.

#### POSSIBLE SYMPTOMS if INCORRECT

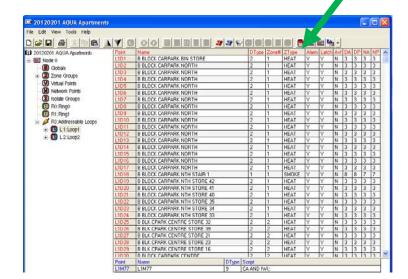
- AZ1 and AZ2 zone faults on the panel.
- XR relay faults on the panel.
- All the XR relay LEDs may be lit.
- All the indication status LED's on the front panel of the AFP2800 i.e. Mains On, PSU Fault etc may be lit.

AFP2800 PCI Tool "PCI ZType Descriptor" v1.2

The "ZType" descriptor is used to display the type of alarm that has occurred, when the alarm is displayed on the main display of the fire panel. This is a requirement of AS4428, which also lists as examples the following acceptable descriptions and abbreviations, which are selectable by using the drop down box in the ZType column when configuring the devices, using the PCI programming tool.

FIRE
SMOKE
HEAT
FLAME
FSW (flow switch)
MCP (manual call point)
VMD (valve monitor device)
PSW (pressure switch)

(sprinkler)



#### Please take note of the following when programming the ZType field using the PCI tool:

#### Standalone Panels

SPR

It is possible to enter alternative descriptions in the ZType field, by directly typing the desired descriptor using a keyboard, to enable a more useful or informative descriptor to be used. As an example, instead of "SPR", the whole word "SPRINKLER" could be entered. The entered descriptor will display correctly on the local panel.

If there is any possibility that the standalone panel will be networked in the future, then consideration should be given to the paragraph below.

#### NFN Networked Panels, Gateways or when connected to OnyxWorks

When using networked panels, the drop down box **MUST** be used to select the desired descriptor, on **ALL** panels located on the network. This is required because the network only has the ability to transmit the "Standard" descriptors as listed in the drop down boxes.

If descriptors other than the "Standard" descriptors are entered, then when alarms are reported to other panels via the network, the "Alarm Type" will present on the display with one of the standard descriptors, which may have no relation to the actual device ZType that has been manually entered on the remote panel.

**PSI Card** 

"Battery Disconnect"

V1.0



This information is applicable to the AFP2800, IFS2600 panels and the NPS series of standalone/supplies that are fitted with the PSI (Power Supply Interface) board as shown above.

The PSI board performs all AC and battery power monitoring, weekly load testing and changeover from AC based supply to batteries. If the AC mains based supply fails, the PSI board will automatically maintain the output from the board from battery power.

The PSI board will continue to monitor the battery voltage whilst the panel and/or other equipment is being maintained solely from batteries.

#### **NORMAL OPERATION:**

If the battery voltage drops to around 20V DC, the PSI card will automatically disconnect the OUTPUT from the PSI card and the panel and/or attached equipment will power down. This functionality occurs to limit the possibility of damage to the batteries if they are discharged to a low voltage.

#### **HOWEVER:**

In this situation, the PSI board itself remains connected to the batteries, with the status LED's remaining active and the card functional. Although the current drawn by the PSI board and LED's will be low, it will still be sourcing power from the batteries and if left for an extended period, the batteries **WILL** drop to a low voltage and damage may occur.

If AC Mains supply is to be knowingly NOT available to equipment that utilises the PSI card, for a period likely to exceed the battery capability, consider disconnecting the batteries or making alternative arrangements to limit the possibility of damage to the batteries.

AFP2800/IFS2600/NPS

**PSI Card** 

"Battery Test Fail Reset"

V1.0

This information is applicable to the AFP2800, IFS2600 panels and the NPS series of standalone/supplies that are fitted with the PSI (Power Supply Interface) board as shown below.

These LED's indicate the current status of the PSI board.

**LED 5 BT.INH** 

= Battery Test inhibited

LED 4 B.TST

= Battery Test in progress

LED 3 C.FAIL

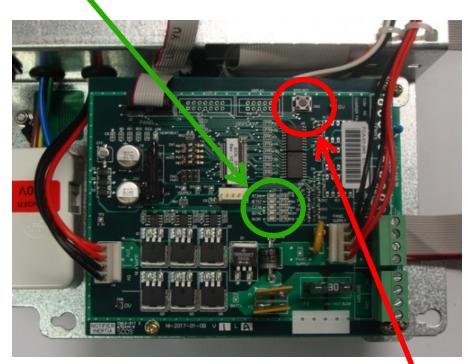
= Charger Fail

LED 2 B.FAIL

= Battery Test failed

LED 1 M.ON

= Mains On



This pushbutton (BTST / RST) is the Battery Test / Reset button

#### **Normal Operation:**

- The BTST/RST button can be pushed once to initiate a battery test. The B.TST LED will light.
- Pushing the BTST/RST button whilst a battery test is in progress will cancel the test.

#### **Automatic Operation:**

- The PSI card initiates an automatic battery test approx. once per week.
- An automatic or manual battery test will run the panel off the batteries for approx. 1 hour.
- If an Alarm occurs on the panel, a test in progress will be aborted and any scheduled test will be inhibited.

#### If a Battery Test Fails:

- The panel will be displaying a 0.2.16 "Battery Fault".
- Changing or disconnecting/reconnecting the batteries will have no effect; it will not clear the fault.
- Initiating a "Battery Test" from the "Test Functions" menu on the panel will not be successful.

# TO CLEAR A 0.2.16 "BATTERY FAULT "GENERATED BY A FAILED BATTERY TEST First establish/rectify the cause of the failed battery test i.e. low battery capacity, then:

- Press the BTST/RST button once to initiate a battery test. The B.TST LED will light.
- Push the BTST/RST button again, this will cancel the battery test and the fault will clear.

Note: 0.2.16 "Battery Faults" generated in other scenarios, such as the removal and replacement of batteries should not require these actions, as the fault should auto clear (non-latching faults) or clear when reset (latching faults). The above actions are only applicable if a scheduled or automatic battery test is deemed "Failed".

#### AFP-2800/AFP-3030

#### FCM-1 & XP6-C Modules in "CLIP"

V1.0 CH 01/09/16

FCM-1 and XP6-C are supervised control modules typically used to switch an external power supply, such as 24VDC, through to notification appliances in the field such as bells, sounders or strobes.

As these are addressable loop modules, depending on the type of other devices that are installed on the same loop, it is possible that the loop could be polling the installed modules in either "Flashscan" or "CLIP" mode.

Please be aware of the following differences when the FCM-1 and XP6-C modules operate in these modes:

In "Flashscan" mode, the 24VDC external supply WILL be monitored internally by the module for failure. Should the 24VDC be removed, the module will report a fault through to the control panel.

- AFP-2800 will report this as an F05 fault
- AFP-3030 will report this as an "Open" fault

In "CLIP" mode, the 24VDC external supply WILL NOT be monitored internally by the module and removal of the 24VDC will not be reported as a fault.

Presence of the $47K\Omega$ EOL (End of Line) resistor on the output circuits IS ALWAYS reported
irrespective of whether the loop is operating in "Flashscan" or "CLIP" mode.

It is suggested that where the FCM-1 and XP6-C modules are to be used, that consideration be given to careful design and selection of devices to be used on the associated loops to allow the modules to operate in "Flashscan" mode to monitor the external supply internally.

Where it is unavoidable that the FCM-1 & XP6-C modules will be attached to a loop operating in "CLIP" mode, it may be required to add a power supply EOL (End of Line) external relay to monitor the external supply, to manually open up the respective output circuit EOL resistor, or trigger another input point, so that a fault is reported.

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Further information on connections to the modules is contained within the install documentation for the FCM-1 & XP6-C modules.

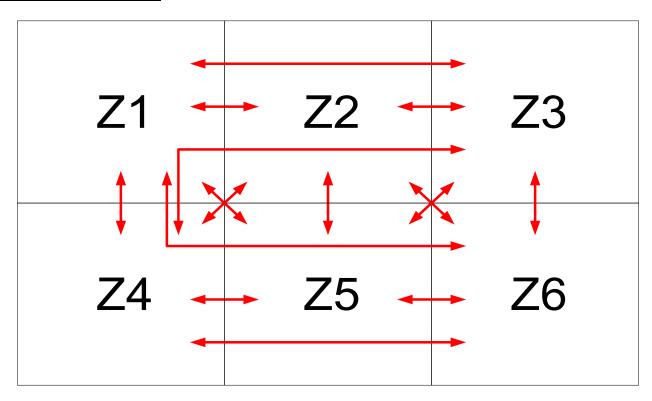
Further information on the "Flashscan" or "CLIP" loop polling modes is contained within the "Flashscan versus CLIP" Tech Tip, located in the "Download Centre" at <a href="www.notifier.com.au">www.notifier.com.au</a>

Technical Support Call: 1800 220 345

AFP2800 Scripting "Two Shot Multiple Zones" v1.1

This Tech Tip details how to achieve "Two Shot" activation of a VP or other OP by a script, where 2 detectors or more have activated in an area, where multiple zones are required to cover larger areas to comply with the Alarm Zone Limitations requirements of AS1670.

#### **Example Multiple Zone Area**



#### **Example Script against an XR relay**

XR1 = ANY2[Z1] or ANY2[Z3] or ANY2[Z4] or ANY2[Z5] or ANY2[Z6] or (Z1 and Z2) or (Z1 and Z3) or (Z1 and Z4) or (Z1 and Z5) or (Z1 and Z6) or (Z2 and Z3) or (Z2 and Z4) or (Z3 and Z5) or (Z3 and Z6) or (Z4 and Z6) or (Z5 and Z6);

The "ANY2[Z?]" statements cover the situation where (2) detectors or more activate within the **SAME** zone. The "(Z? and Z?) statements cover the situation where (2) detectors or more activate across **MULTIPLE** zones.

More details on the "ANY" operator can be found in the scripting section of the AFP2800 manual

#### **Explanation**

The arrowed lines in the diagram above, indicate all the possible combinations of Zones that must be "ANDed" together, in addition to the individual "ANY" Zone statements, to achieve the desired "Two Shot" capability across the whole area.

For a small number of Zones, a diagram such as that above can be useful in ensuring that all relevant points are written into the script, by simply crossing off or marking the relevant arrowed line combinations that have been entered.

For a larger number of Zones, the following spreadsheet can be used to ensure that all relevant "AND" combinations are covered and checked off.

ZONES	1	2	3	4	5	6	7	8	9	10	11 🛊	12	13	14	15	16	17	18	19	20
1	Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND									
2		Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND								
3			Χ	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND							
4				Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND						
5					Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
6						Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
7							Χ	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
8								Х	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
9									X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
10										X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND
11											Х	AND	AND	AND	AND	AND	AND	AND	AND	AND
12												Х	AND	AND	AND	AND	AND	AND	AND	AND
13													Χ	AND	AND	AND	AND	AND	AND	AND
14														Χ	AND	AND	AND	AND	AND	AND
15															Х	AND	AND	AND	AND	AND
16																Х	AND	AND	AND	AND
17																	Х	AND	AND	AND
18																		Х	AND	AND
19																			X	AND
20																				X
	Use or create a spreadsheet with all required Zones as shown above																			
	2																			
	3									,	Zones				,	ND" ir	na Zone	es toae	ther	
	4										s acros									

#### This information is supplied supplementary to Product Bulletin PB14-003 (IFS-2600 Termination Board Discontinuance)

These images show the likely impact of upgrading an **OLD version IFS2600** with the newer style Termination Card & Power Supply



Fitted with obsolete:
# 11291 Termination Card
# 1371 240/30V AC Transformers



Upgraded with ALL of the following
# ASY-02-020 Termination Card (PSI)
# ASY-02-021 PSI Card Kit
# ASY-01-056 5.6A Power Supply Upgrade

Shown with the adaptor plate mounted in the "HI" position. Impacts on zone expansion card area.



Upgraded with ALL of the following:
# ASY-02-020 Termination Card (PSI)
# ASY-02-021 PSI Card Kit
# ASY-01-056 5.6A Power Supply Upgrade

Shown with the adaptor plate mounted in the "LO" position. Impacts on battery area.

#### NOTE:

Where the OLD version IFS2600, fitted with 240/30V AC transformers, has been previously upgraded with the ASY-01-016 2.6A switch mode supply, connecting to the remote input terminals (usually because a DA-30 BOWS or IFS-2008 gas card is installed) typically both the 240/30V AC transformers AND the 2.6A switch mode supply can be removed as the new 5.6A supply should be capable of supply all the load current.

#### **WARNING:**

REPLACING AN OLD STYLE TERMINATION CARD WITH A NEW STYLE TERMINATION CARD, WITHOUT PERFORMING THE POWER SUPPLY UPGRADE, WILL RESULT IN INCORRECT OPERATION OF THE PANEL AND POSSIBLE DAMAGE TO HARDWARE.

#### **PRECAUTIONS:**

Also, please bear in mind that due to the changeover of the power supply, some re-wiring and termination of the 240VAC cabling from the mains switch in the older panels is required. Please ensure that competent staff only perform these upgrades.

For further information please contact Notifier Technical Support.

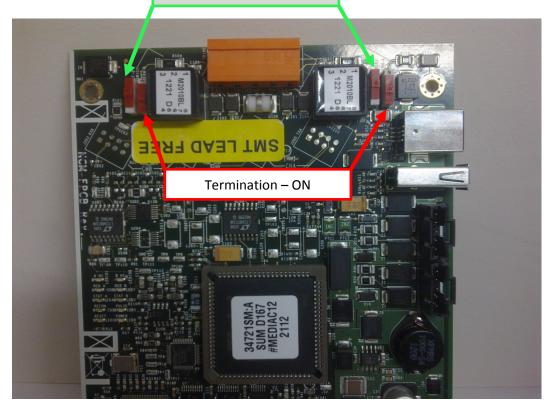
This advisory clarifies the switch settings when using NFN standard speed NCM-W wire networking cards to network AFP2800 fire panels or other equipment.

In particular, the position of the "Termination" switch is most important, as network performance and functionality can be impacted in some circumstances running the network ports with the "Termination" switch off.

Only in special circumstances would it be necessary to alter the settings from the default standard settings as shown in the image below.



Earth Fault Detection - OFF



NOTE: It should be remembered that when a single panel is connected via a Gateway to other devices such as an ONYXWorks Workstation, ONYXWorks FirstVision, Modbus or BACnet interface, that these devices actually interface via NFN network and as such, this would be regarded as a networked system.

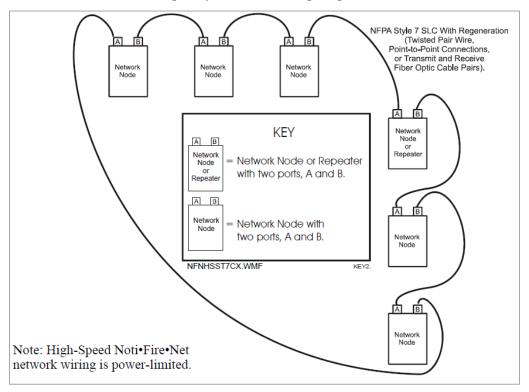
#### **SUPPORT**

For further information please contact Notifier Technical Support.

HSNFN (High Speed NOTI-FIRE-NET) is being implemented in more and more projects using either wire or fibre medium for interconnections between panels, or a combination of both.

When using the older standard speed NFN (NOTI-FIRE-NET) network cards it was NOT required to be specific about which ports connected cards. Wire connected cards were also NOT polarity sensitive.

HSNFN documentation is more specific about always connecting Port A thru to Port B between cards located on the network "ring" as per the following diagram;



When "Wire" is used to interconnect HSNFN cards, the Port A to B requirement specifically applies, additionally; wiring IS polarity sensitive and MUST always be connected between like terminals.

When "Combo" HSNFN cards are used (ie one port is Wire & the other Fibre), in order to maintain the Port A to B requirements, the port assignments will need to be altered on the "Combo" card at one end of the "Wire" segment by Notifier Tech Support.

**IT IS HIGHLY RECOMMENDED THAT THESE PRACTICES ARE FOLLOWED,** to alleviate any problems and to avoid possible rework re-patching the segments.

For further information please contact Notifier Technical Support.