GENERAL INSTALLATION DETAILS – 7000/ASP – SPRINKLER MONITORING PANEL

*** The Series 7000ASP will come Pre-programmed to suit the Site**
The programmed details supplied with the panel will show the Interface address/ Loop & location details

* **The Sprinkler panel software is based on an addressable Fire alarm panel and certain functions are shown but not used/required**

*** Do not connect any loops prior to the initial tests detailed below * Cables should be meggered before any connections are made**

IMPORTANT INSTALLATION NOTES

Ensure the panel is protected via a Breaker protected circuit either locally or at the distribution board and of sufficient current to power the system. The enclosure is suitable for use in environmental conditions up to IP42

INSTALLATION

The unit is wall mounted with a lockable hinged front door. Connection for the Front Fascia to the motherboards are via pluggable ribbon cables. The front door can be removed for installation by removing the screws fixing the hinged door to the back box.

FIXING OF ENCLOSURE

The back box is hinged to the front door on the left-hand side. The top of the box has 20mm diameter knockouts. The unit is fixed to the wall via 4 off dished fixing holes located in the corners. The mains supply entry is preferred to be located at the last knockout on the right-hand side.

POWER SUPPLY CONNECTIONS

The internal power supply requires the following connections-
1) 230v AC supply to the power supply mains terminals: 2) 24v DC standby Sealed Lead Acid Battery to the connection leads provided

LOOP CONNECTIONS

Each Loop has four Terminals for loop Out & Return. Any unused Loops should be linked out (Out & Return + & - linked)

ALARM AUXILIARY OUTPUTS

Auxiliary relays outputs are provided for Common Alarm together with Common Valve, Common Fire & Common Plant for the signals being monitored (see Wiring Schematic)

COMMON FAULT AUXILIARY

One set of Fault contacts are provided. These contacts will operate on any fault condition including a supply fault. The contact is failsafe (the fault relay is normally energised when the panel has no faults) and the Auxiliary contact notation shown is for the relay in its normal mode.

USER ACCESS CODE :

Access the user controls is accomplished by the induction of a user code via the panel's keypad. The factory code is 13131.
Press ENT - code 13131 and then press ENT to confirm entry. Lamp Test & Queue review controls do not need code entry for operation.

IMPORTANT DEVICE NOTES:

Device Values : Using Function 7-1*, for a Switch monitor or I-O the following values should be shown :-*
4 = Fault (O/C or S/C between Interface & item being monitored) # 16 = Normal Mode # 64 = Device being monitored in ALARM
Device in Alarm: If certain devices are in alarm condition due to Site conditions (IE Valves Being Closed instead of open) it is important that these devices are either Isolated using Function 6-1-2 /6-1-3 or the EOL Resistor is fitted instead of the cables to the Device when doing an Auto Learn. The Devices in Alarm will cause the " Auto Learn " function to malfunction.
If the EOL resistor is fitted to the Interface terminals once the "Auto learn" function has been carried out and the Device count is correct the panel should be place into active mode using function 8-4-1. The cables for the Device can then be connected into the interface and the EOL fitted.
With Panel in Active mode it will not perform a "Auto Learn" function when Reset - this only occurs when in Installation mode

INITIAL POWER UP TESTS

1.1) Connect the 230v AC Supply to the power supply mains terminals. Various Panel LED's together with the Status LED will initially flash Followed by the LCD displaying - installation mode, Date & Time together with the Company name & program reference. The System ON LED will flash (to indicate Installation mode)
1.2) Connect the Standby batteries. (The Battery Charger fault might be displayed depending upon how quick the batteries are connected To clear fault enter USER CODE and press System Reset)
1.3) Press "Lamp Test" – LCD display will test; System LED's will light, the Status LED's will change state or illuminate, and a buzzer will sound
1.4) Press "Alarm Status Lamp Test" – All Device status LED's will light.
1.5) Enter User Code – Select function 8-1 and enter the Time & date (Note: if power is disconnected the Time & date requires to be re-entered)
1.6) Disconnect the battery supply: After a delay (approx. 120 seconds) the Internal buzzer will sound, Supply & Fault LED's will illuminate. The LCD display will show "Battery Charger Fault". Reinstate the Battery supply. Enter User Code, press Buzzer silence & then Reset. The LCD will return to its Normal mode & the Fault LED's will go out.

INITIAL LOOP CHECK

The Common Valve / Fire & Plant Auxiliary outputs are operated via an internal 3way Interface already connected & programmed.
The address & loop this interface has been connected to can be found on the internal Chassis and in the Programmed details supplied.
2.1) Enter user Code – Go to function 7-1 and enter: If the internal interface is not connected to Loop 1 – press Right (2) key and then Up (1) key To go to the correct loop. The Count value should then read 003. Press ENT and using Up (1) go to the first Interface address The Bottom Line will then show the Module type and a Value of 16.
2.2) Press Exit to go back to Main Display Screen – Shows Company information /date & time

LOOP DEVICE OPERATION

3.1) Remove Loop 1 links & connect loop 1 Cables (having ensured the Interfaces have been correctly addressed)
3.2) Enter user Code and select function 8-3-2 and enter – Clear the NVRAM
3.3) Press System Reset - the panel will perform a "AUTO LEARN " for the devices fitted
3.4) Enter Access code and select function 7.1 and check the that the Device count is correct (If the Internal 3 way I-O is fitted to Loop1 the count with be increased by 3) . If the Device count is not correct Press ENT and using the UP (1) Key scroll though the Device Addresses and check That all device type is shown and a value of 16
** If any address is shown a valve of 64 (Alarm) this causes a problem with the Auto Learn function as the panel will be receiving Alarm Conditions at the same time. This will cause Panel not to function correctly with regard to the Device status indications. See above Important Device Notes
3.5) Check each device for " Alarm Condition " and correct status Device indications. On each new Alarm Signal the Status LED indications will flash and using the " Queue Review Alarm " switch accept the signal. The Status LED's will go steady.
3.6) Repeat the above for any other Loops being used.

AUXILIARY CONNECTIONS

4.1) Connect all External auxiliary outputs and check for correct operation
4.2) To Isolate external auxiliary outputs – enter Access Code - Press “Auxiliary Isolate” switch. Auxiliary Isolated LED will illuminate
To return Auxiliary relay operation to Normal depress Auxiliary Isolate Switch again

LAMP TEST

To test LCD Display/LED’s and the internal buzzer, Depress the Lamp Test button, all external LED’s will illuminate and the buzzer will sound. The Status LED’s will change state for Valves & illuminate for Fire or Plant. Release the button – the panel will return to its normal mode

STATUS LAMP TEST

To test all status facia LED’s Depress the Status Lamp Test button, all Status LED’s will illuminate.
Release Button panel will return to its normal mode

ACTIVE MODE

Once all loops & Devices have been tested, enter Access code and go to function 8-4-1 and place set the panel to ACTIVE MODE
System ON LED will go steady.

FUNCTION LIST USED FOR SPRINKLER PANELS

1.Review Historic Log
1-1 Display Historic Log
1-5 Read/Clear Auto start Count

5.Input/Output – Disable & Assign
5.1 Configure I/O Groups

6.Device Set-up
6-1-1 Disable loops
6-1-2 Device Disable
6-1-3 Set Selective Disablements

7.Monitor Device Counts & Test
7.1 Device Count, Type & Value

8.General
8.1 Time/Date & Timers
8-1-1 Set Date & Time
8-3. Memory
8-3-1 Checksums
8-3-2 Clear Non-Volatile RAM
8-3-3 Calculate Customer Flash Checksum
8-3-4 Calculate Program Flash Checksum
8-4 Other Features
8-4-1 Active/Installation Mode
8-5 Network Configuration
8-5-2 Known Panels (only used on network systems)
8-5-3 Installation Status (only used on network systems)
8-5-4 Broadcast Configuration (only used on network systems)
8-5-5 Communication Channels (only used on network systems)
8-9 Version Information

NOTE : To access function Enter Access Code .
Press ENT - CODE – ENT

MOST COMMONLY USED FUNCTION DETAILS

1-1 Display Historic Log : The panel logs all events in the internal log. It can store a rolling 10000 entries. When full, the latest entry is added and the oldest entry discarded. Use ^ (1) and v (3) keypad keys to view Last or Latest event.

7-1 Device Count, Type & Value : Use this function to check that all loop devices are present . Use > to select Panel 01 : Use ENT to select L01 (or ^ (1) to increase loop number) : Use ^ (1) to select Device number
The Top Line RHS will show the Loop Device Count and the bottom line (L to R) Address – Module Type – Value
For switch monitors or I-O the Values are detailed below –
16 = Normal Mode :: 4 = Fault (O/C or S/C between interface & Device) :: 64 = Device in Alarm :: 17 = Double Address

8-1-1 Set Date & Time : The date & time will be displayed on the LCD whist the system is not in Alarm or Fault. Use ^(1) to change day then ENT : Use ^(1) to change date then ENT : Use ^(1) to change Month then ENT : Use ^(1) to change Year then ENT :
Use ^(1) to change hour then ENT : Use ^(1) to change Minutes then ENT : Press ESC until LCD shows Main display and Time
NOTE : Removing panel power will erase date &time and will require date /time to be re-entered

8-4-1 Active/Installation Mode : The system should always be left in ACTIVE mode after commissioning. When in Install mode the Green System ON led will flash. Use ^(1) to set mode to Active then press ENT. Press ESC until LCD shows the Main Display.
When in Active Mode the Green System ON Led will be continuously illuminated.

WIRING SCHEMATIC