ADDRESSABLE FIRE ALARM

CONTROL PANEL

USER MANUAL

OPERATIONAL
& PROGRAMMING

CONTENTS

CHAPTER 1
GENERAL INFORMATION

1.1 INTRODUCTION

Asenware AW-FP100 Series Fire Alarm Control Panel are intelligent panel which are carefully designed to make it suitable for most of applications. It can be configured with other panels or control systems. It's user friendly functionality makes it suitable to program and configure the devices. 7" touchscreen display gives the information for fire alarm, trouble , supervisory and other related information all the time.

1.2 SYSTEM FEATURES

- 7" Touchscreen LCD Color Display which gives necessary and additional information as described in EN:54-2
- Delay function for zones for Notification Appliance Circuits (NACs)
- 2 wire cable for all addressable devices
- Zone test and individual device testing
- Zone Disable and individual device isolation
- Delay, override and abort functionality
- User friendly : easily configurable windows using Panel itself
- 250 intelligent detectors or modules for one loop circuit
- Up to 8 Loop cards can be installed and configured
- Interconnection of ….panels and other equipments
- 2000* events can be stored in the history
- Mini- Printer to print the status of events
- Network with Central Control Panel
- Access Level entry to control and configure panel
- Integral power supply with charger
- Circuits can be configured as Class A or Class B
- Fire Alarm, Fault (Trouble) and Supervisory relays
- Earth Fault detection
- CAN BUS Network System
- Network Available Options : GSM/IP/Cloud/ Mobile APPs

1.3 DISPLAY AND FUNCTION KEYS

Large display screen makes the panel easily programmable, below Figure 1.1 shows LED indicators and functions keys available

1.3.1 Liquid Crystal Display

It displays all programming screens, as well as events, history, device and other information. At normal condition it displays Fire, Fault , Supervisory and general information. Mosts Recent events are displayed on the 7" touchscreen LCD. Effortless programming can be performed using alphanumeric keyboard.
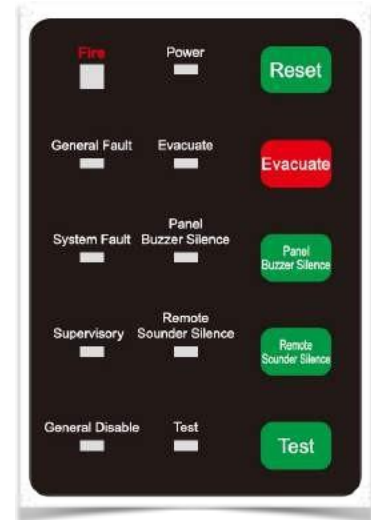
1.3.2 Fixed Function Keys

Reset

Press RESET to eliminate all current alarms and reboot the system. The whole process takes 30-60s.RESET clear all latched alarms and other events as well as turn off event LEDs. If alarms or other off-normal events exist after reset, they will resound the system and relight the LEDs.

Evacuate

 Press this key, holding it down for 2 seconds, to activate all silenceable fire output circuits.

Panel Buzzer Silence

By pressing this key, the panel sound will be silenced but LED will keep open.

Remote Sounder Silence

By pressing this key, it will silence all Notification Appliances.

Test

For Lamp Test, press this key to test the LED indicators on the left of the keypad, the panel circuit LEDs.

1.3.3 LED Indicators

Table 1.1 LED Indicators

LED INDICATOR	COLOR	FUNCTION
Power	Greeen	Illuminate when power supply is on
Fire Alarm	Red	Illuminates when at least one fire alarm event exists
General Fault	Yellow	Illuminates when at least one fault occurs
Evacuate	Yellow	Illuminates when evacuation or drill process occurs
System Fault	Yellow	Illuminates when any system is in fault or system is not working as expected
Panel Buzzer Silence	Yellow	Illuminate when panel is silenced and stay flashing until panel is reset
Supervisory	Yellow	Illuminates when at least one fire alarm event exists
Remote Sounder Silence	Yellow	Illuminate when Notification Appliances is silenced and stay flashing until panel is reset
General Disable	Yellow	Illuminates when disable has been performed
Test	Yellow	Illuminate when the panel carries out Lamp test for all LEDs

1.4 SYSTEM COMPONENTS

AW FP 100 Series Fire Alarm Control Panel are composed of the following main parts

1.4.1 Main Control

The main control part is responsible for processing and analyzing the data transmitted from other parts, and activating other parts of the system based on the result of data analysis, for example, sounding the buzzer of the panel when a fire is detected.

1.4.2 Display Element

The display element provides main output interface for alarm signal, fault, supervisory and interface for routine maintenance and query.

1.4.3 Input Method

From the display, it is very convenient for the programmer to input and register the devices.

1.4.4 Power Supply

The power supply is designed to supply power to all devices in the system. The system adopts the special firefighting equipment powered with DC 24V output, which can provide alarm or feedback signals, such as main power fault, battery fault, battery under-voltage and battery charging, and have a good capacity for interference.

!

Customer is recommended to do battery calculation for proper rating of batteries

1.4.5 Loop Card

The loop card is used as the driver of detector/module bus, which may drive 250 intelligent detectors or intelligent modules and can be equipped with bus type fire indicating panel.

1.4.6 Interconnection with Devices

The system can get access to various intelligent smoke, heat or combination detectors produced by the manufacturer, and the main types include detectors, modules, horn strobes , manual call point and so on.

The system can be interconnected to Modules, Manual Call Point, Relays, Deluge vale and Gas System. The system can get access to multiple intelligent modules e.g. Input module AW-D110 , Control Module AW-D112 , Supervisory Module and Isolator Module AW-D111 and D114 respectively. Moreover, it can also get access to intelligent sounder visual indicator AW-D106, and intelligent manual call point AW-D105. Panel can be configured with Gas Extinguishing system, deluge system or other water based system and supervisory of various types of valves.

1.4.7 Printer

The system is equipped with a special mini-printer as standard, which can print alarm, supervisory and fault messages for future reference.

1.4.8 Printed Circuit Board

The control panel electronics are contained on one printed circuit board that incorporates with loop cards and the central processing unit (CPU). The built-in power supply includes an integral battery charger. A display unit is connected over the PCB.
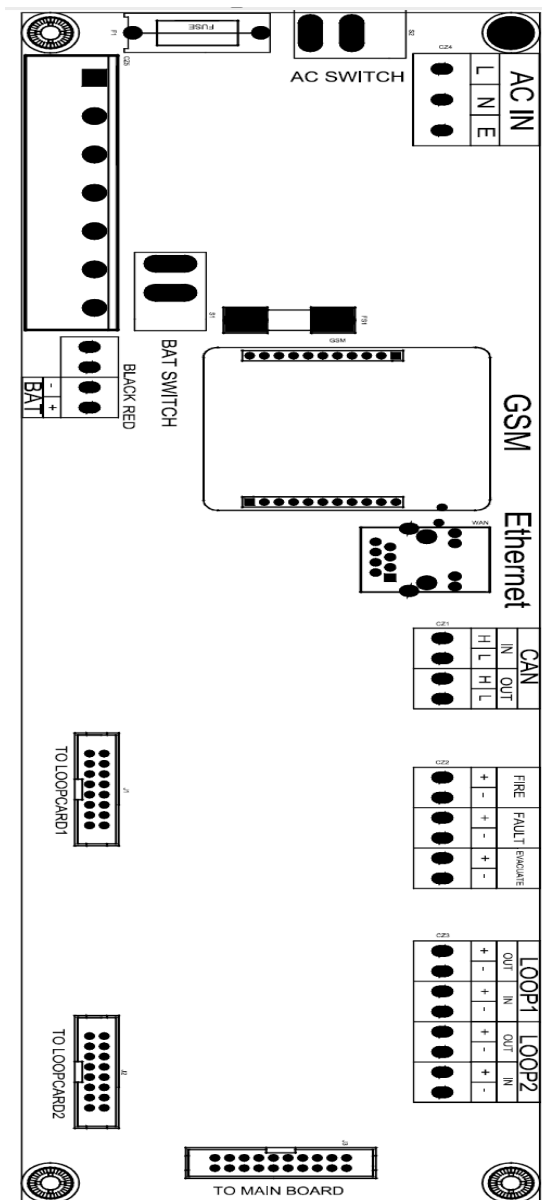
1.5 TECHNICAL PARAMETERS

1.5.1 Power Rating

Mains power supply: AC 220V±20%/50Hz or DC24V;
Backup power supply: DC24V maintenance-free battery BAT12V/5AH

1.5.2 Environmental Condition

Ambient temperature: -10℃～+55℃
Ambient humidity: ≤95% (40℃±2℃, no condensation)

1.5.3 Terminals

Refer to product instructions for detailed technical parameters of the detector, module, sounder visual indicator and so on

CHAPTER 2
OPERATION

2.1 OVERVIEW

Control panel constantly monitors the events. These events can be fire, trouble (fault) or supervisory or any other types. Devices and control panel constantly transfer the information. Some events are considered background events and are not seen by the user. The events that are of primary concern to the operator or user are those identified as off-normal events. An event which indicates any activity or change in condition that requires the attention and/or response of an operator or user are off-normal event for example system troubles, supervisory device condition changed.

2.2 MESSAGE FORMATS

This section describes the format of messages appears the event screen. Main display screen has four windows which shows the events like fire, fault, supervisory and general which includes zone testing and others. In the following sections it will be described how to deal with those events.

2.2.1 System Normal Screen (Home Screen)

During normal condition all fields on the screen are empty. And time and access level are shown at the bottom of the screen as shown in Figure 2.1. The first window shows the fire events, and so on. Multi level access level, based on authorization level which indicates the level of authorization is shown at left side of the bottom of screen
Big green **MENU** soft touch button on the right side of screen will let the user enter for all
functions which are described in this manual in subsequent sections. Blue **LOGIN*** soft touch button will pop-up the password window, and authorized person can access based on his/her level of authorization. And whenever the user wants to exit from the system, the red **EXIT** soft touch button can be pressed which will logout the system and if user wants to enter again he/ she must login again.

*Note : User must press the Right Click after entering the password.
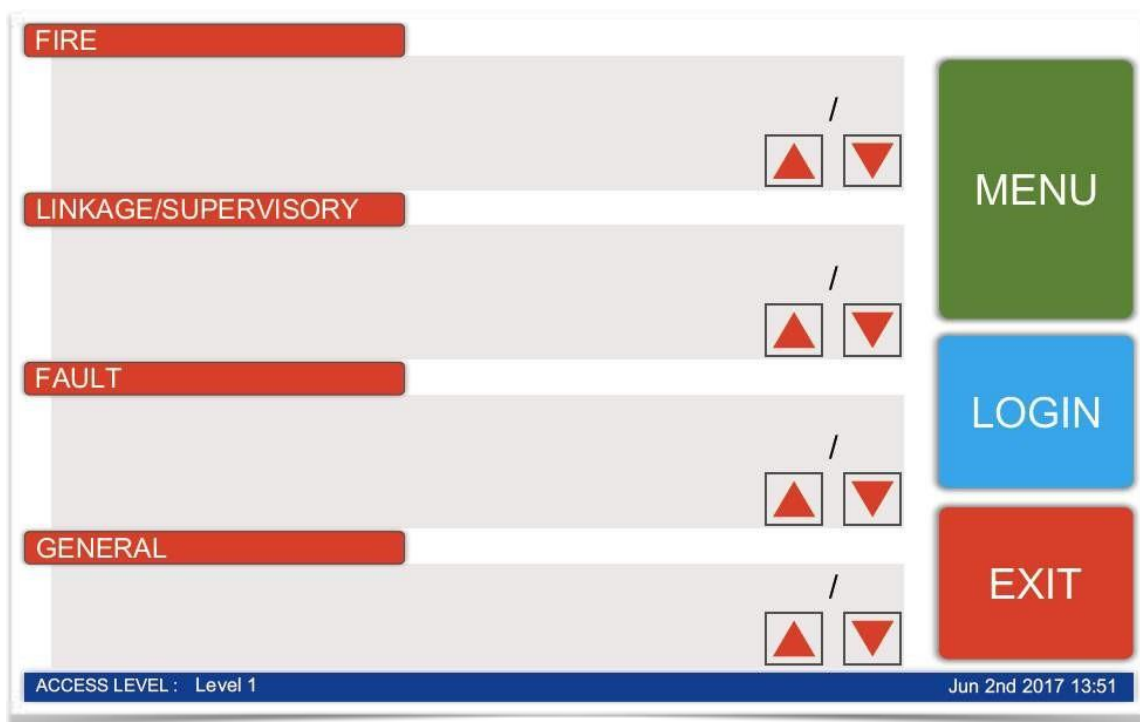
Figure 2.1 System Normal Screen or Home Screen

2.2.2 Event Screen Format

When any events happens it is appears in the respected windows for example if detector gives fire signal to the panel it will appear in the FIRE window as shown in Figure 2.2. Similarly, specific event will be appeared. For device or zone testing or disablement will be indicated in GENERAL window. This multiple event list priority level is as per EN 54:2.

The most recent event in the specific window will be appeared on the top. If there are more events in one field, it can be scrolled up and down using the UP/DOWN arrow in the bottom right corner of respective window.
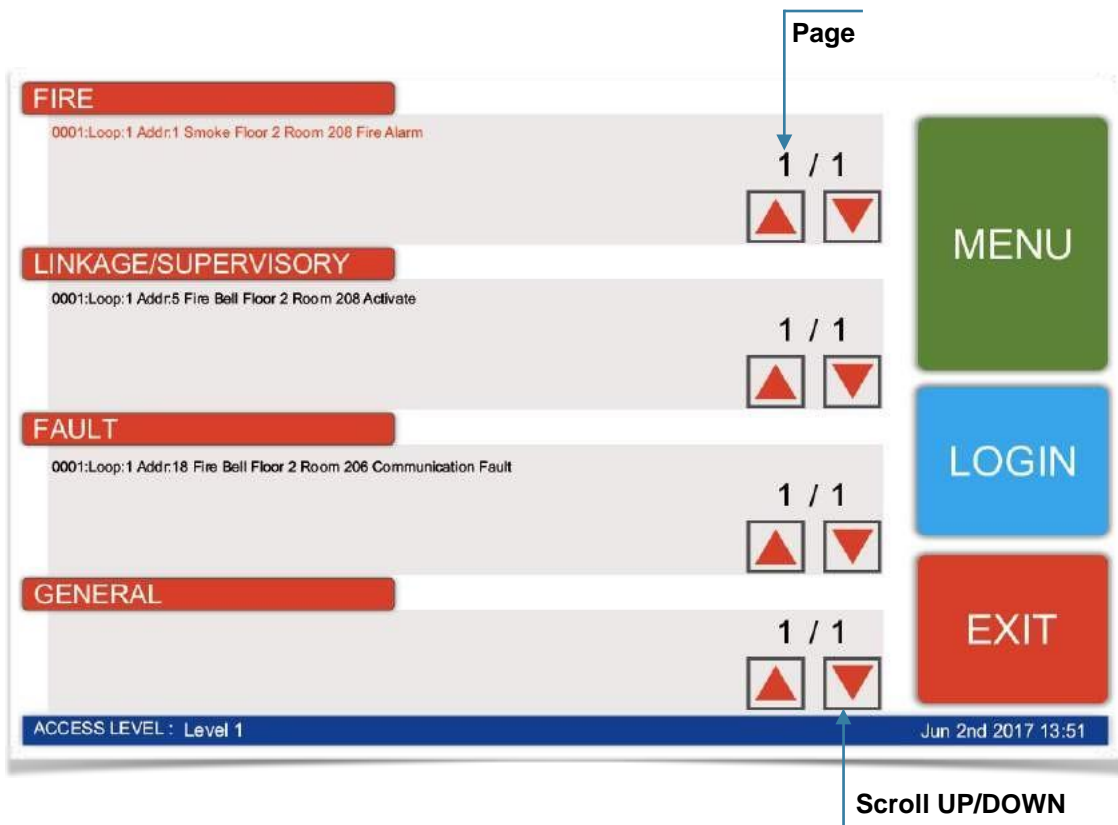
Figure 2.2 Event Screen

2.2.3 Main Menu

The Main Menu touch button on the normal screen will take the programmer to access displays, history information, printing and programming menus and other settings. To enter **MENU,** user must login first or the password window automatically will appear as shown in Figure 2.3 . Figure 2.4 shows the Main Menu window which contains few other functional touch sub-menus for device settings and other settings.
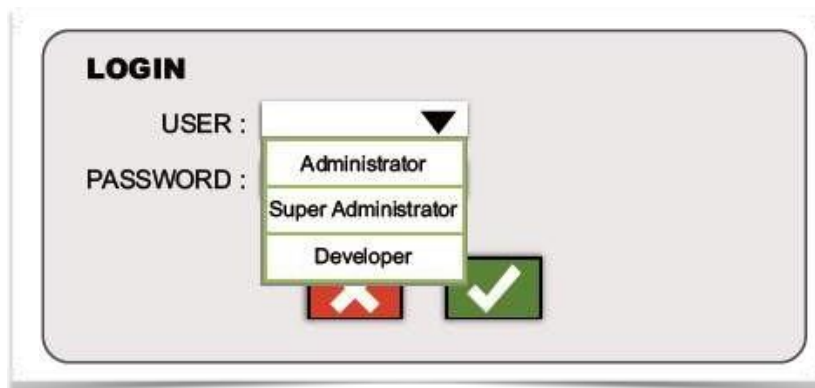
Figure 2.3 LogIn Screen
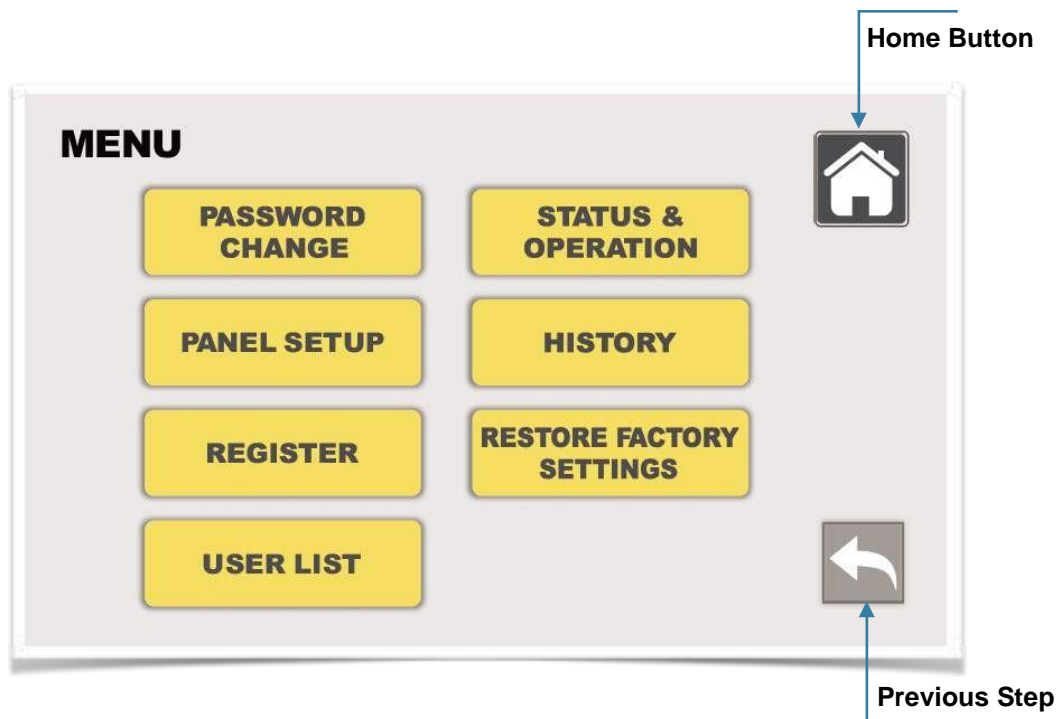
Figure 2.3 Main Menu Screen

In the menu window, there are options to change password, panel set-up and others.

☑ **Home Button will take the user to the main window at anytime, which will help the user to exit the system or start-over the system programming.**

☑ **Previous Step arrow will take one step back**.

2.2.3.1 Password Change

The PASSWORD CHANGE touch button will help the user to change or update the password. Password for level 2 and level 3 can be changed in this sub-menu window. Refer to Figure 2.4.

- Administrator is considered **Level 2** authorized person.
- Super Administrative is considered **Level 3** authorized person.
- Developer is **Level 4** access, only manufacturer or the person properly trained by manufacturer to make changes or rectify the system (This option appears in **LOGIN** window) is authorized to this level of access.

Note : User must press the Right Click to confirm the changes.

Press to Confirm the Changes
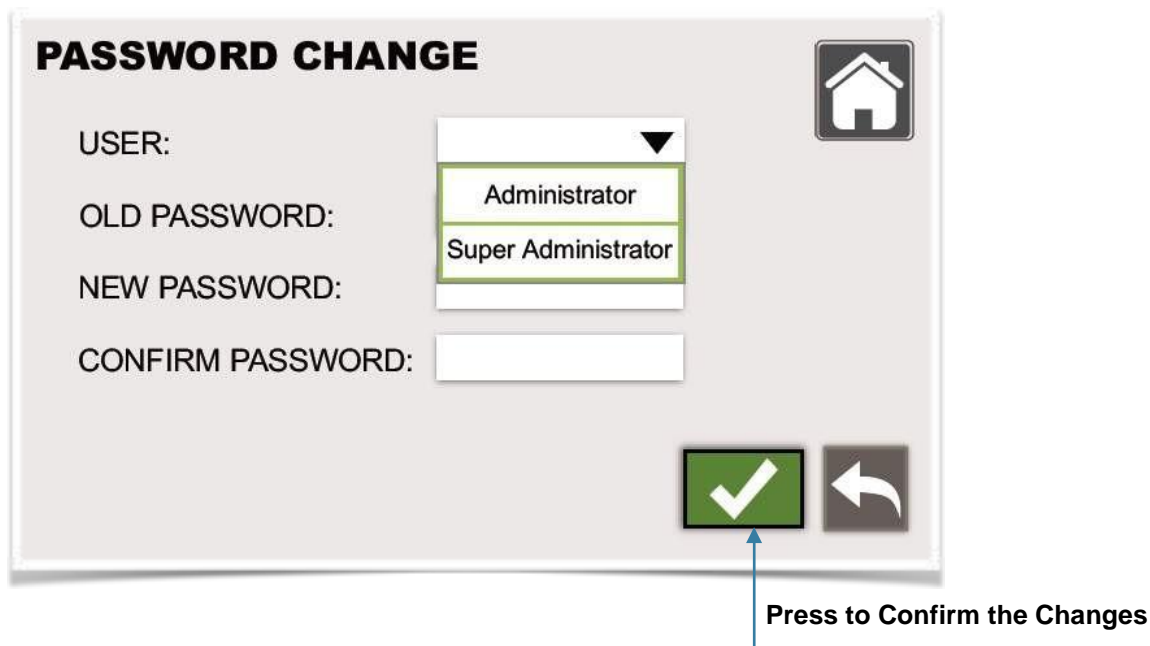
Figure 2.4 Password Change Screen

2.2.3.2 Events History

The History screen allows the user to select a type of history file to view. As it can seen from the Figure 2.5, it includes three sub-categories which can be selected by pressing the soft touch button on the screen.
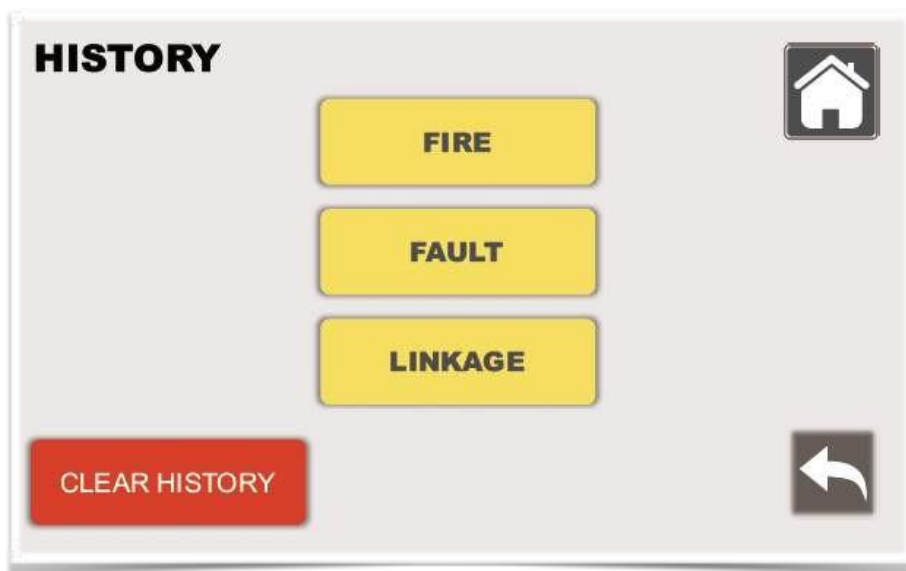
Figure 2.5 History Screen

Note : **Clear History can be performed by Level 4 authorized person only.**

2.2.3.2.1 History Sub-Categories

- **Fire History :** Up-to 1000 events can be stored in this file and most recent one will be appeared on the top. As shown in Figure 2.6, this file includes the details of fire event i.e. description and time of the fire event. User can select any page by typing the page number and pressing **GO** touch button.

- **Fault History :** Up-to 500 events can be stored in Fault history file and most recent one will be appeared on the top.

- **Linkage History** : Up-to 500 events can be stored in Linkage history file and most recent one will be appeared on the top. It includes all supervisory events and any linkage with the system.
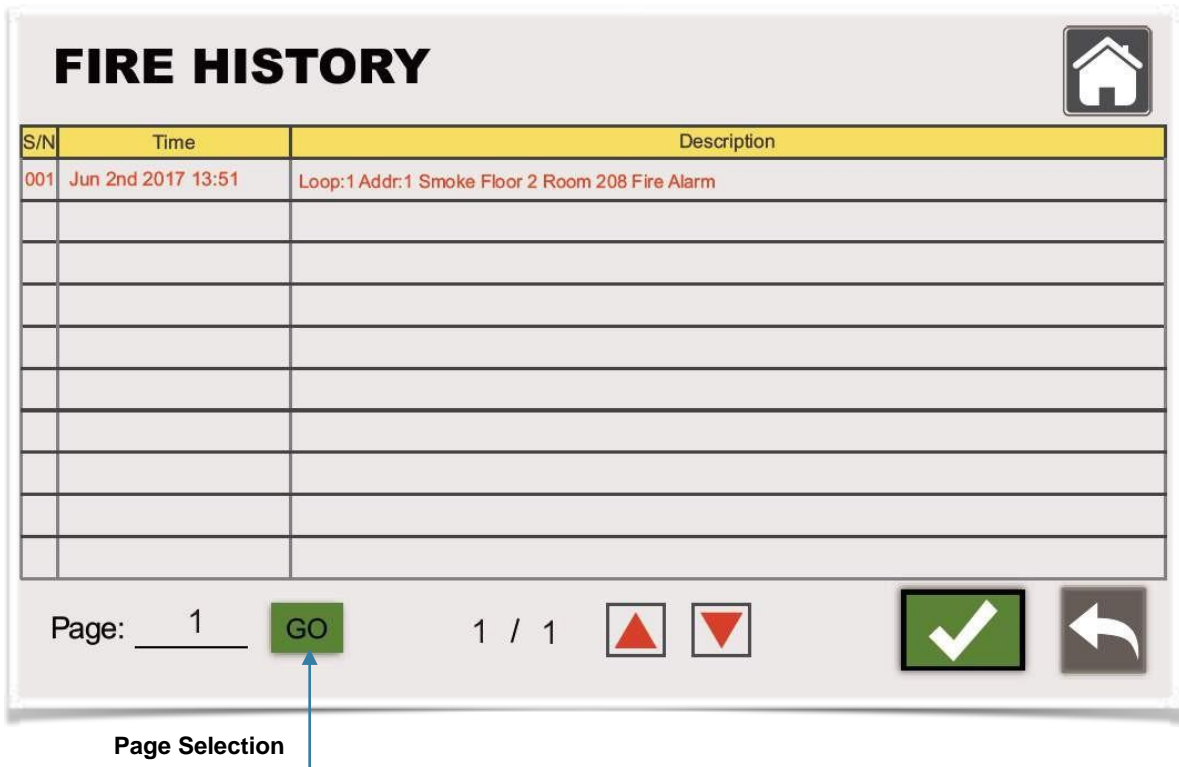
Figure 2.6 Fire History

2.3 OPERATION OF CONTROL PANEL

Even when system is in normal condition it constantly or at regular intervals, monitors some functions to make its sure that panel is in fully operating condition all the time. Some functions are illustrated below :

- Monitors all devices and Panel Circuits to check for valid replies, alarms, faults, circuit integrity, and supervisory or linkage signals
- Keep refreshing the display and time
- Monitors power supply troubles and batteries
- Check/test system memory
- Monitors for CPU failure
- Scanning the panel display and for any entries

2.3.1 Event Condition

When the panel detects an event and the information is displayed on-screen in the specific window. At the same moment the event is recorded in the history. Panel will make sound on receiving the event which can be silenced using silence soft key on the panel. This action will silence the alarm however the LEDs will change from flashing to steady for the event and silence. If the panel is networked, it will send signal to network panel. Silence key acknowledge the event. Silencing do not affect new event. If there is new event occurs during silence period, panel will sound the alarm again.

2.3.2 Fire Alarm Event

When the panel receives signal from any detector or monitor modules (initiating devices), following functions are performed by panel :

- Produce alarm at the panel
- Activates the System Alarm relay for fire routing device
- Flashes **'Red'** Fire LED
- Displays the Alarm condition on the screen in the Fire Window with the description of the location and complete address of the device
- Starts delay time, if configured, for control devices
- Activates the general alarm in the specific zone
- Sends alarm message to history , printer and repeater (annunciator panel), if installed

2.3.2.1 Action to Fire Alarm Event

When a fire incident occurs, the operator must take action to respond to fire alarm :

Silence the Panel sounder : By pressing the soft key **Panel Buzzer Silence**, the local sounder will silence and the Fire Alarm LED will change from flashing to steady. By pressing this, panel will acknowledge the signal to panel screen, history buffer, printer and annunciator, if installed.

Silence any activated outputs devices that are programmed as silenceable: By pressing the soft key **Remote Sounder Silence**, remote sounder will silence and the Remote Silence LED will become steady. This silenced message will be send to history buffer, printer and annunciator, if installed.

Delay Action : If the fire zone was programmed for delaying the output devices, more actions need to me takes by operator/user e.g. if it's a false alarm, operator can **abort** any actions to output devices and if user wants to override the delay for actual fire. (More is explained in the later section of this manual).

Correct the condition which causes the alarm.

Reset the Panel to normal condition : Once the alarm condition is corrected, to return the System to normal condition press **RESET** soft key on the panel.

2.3.3 Fault Event

Any troubles in electrical or mechanical part of the panel, device, connection or whole system is considered as fault. Panel will take action accordingly and following actions will take place :

- Produce sound at the panel
- Activates the System Fault relay for fault routing device
- Flashes **General Fault** LED
- Displays the fault condition on the screen in Fault Window with the type of fault, description of the location and complete address of the device , if the fault is in the devices or in the circuits (loop).
- If the the fault is from system e.g. CPU fault , programming fault or memory fault , it will make **System Fault** LED flash along with **General Fault** LED.
- Sends fault message to history buffer, printer and repeater (annunciator panel), if installed

2.3.3.1 Action to Fault Event

When a fault incident occurs, the operator must take action to respond to fire alarm :

-**Silence the Panel sounder :** By pressing the soft key **Panel Buzzer Silence**, the local sounder will silence and the Fire Alarm LED will change from flashing to steady. By pressing this, panel will acknowledge the signal to panel screen, history buffer, printer and annunciator, if installed.
- Check the trouble message on the display screen and refer Table 2.1 and Table 2.2 for its explanation , if necessary.
- Correct the condition which causing the fault.
- If all troubles clear and no supervisory signals or fire alarms exist, the control panel returns to normal condition automatically and send the message to history buffer, printer and annunciator, if installed.

2.3.3.2 Types of Fault

There are many types of fault signal which gives message on the screen, here they are describes as point fault and system fault. Table 2.1 and Table 2.2 summarize some troubles which will appear on the screen when any of fault incident occurs.

Table 2.1 Point Fault

FAULT TYPE	DESCRIPTION	ACTION
Earth Fault	Panel Earth Fault in DC supply	correct the fault
AC Failure	The main or auxiliary AC power failure	Determine if its AC power loss or wiring connection
Battery Fault	Any failure in battery and battery charger when it can not charge the battery	Check for batteries if it need to be replaced. If charger is drawing enough current to charge.
Fire Routing Fault	Fire routing wiring connection open	Check and correct
	Fire routing wiring connection short	
Fault Routing Fault	Fault routing wiring connection open	Check and correct
	Fault routing wiring connection short	
Evacuation Fault	Evacuate output open	Check and correct
	Evacuate output short	
Device (Address) Fault	Any type of fault i.e. open, short , communication etc. occurs in any devices e.g. detectors , modules etc.	Check the connections from the module to the input or output device to which it is wired.

Table 2.2 System Fault

FAULT TYPE	DESCRIPTION	ACTION
Output Fault	Loop Card unable to give output	Check and correct
LoopCard Communication Fault	Loop Card missing	Check in programming if registered and correct
EERON Fault	Memory Fault	Check and correct or replace
IB Board Communication Fault	Any failure in board	Check and correct or replace

2.3.4 Linkage/Supervisory Event

When the panel receives signal from any monitor modules, which is programmed for supervisory action , following functions are performed by panel :

- Produce sound at the panel
- Flashes Yellow Supervisory LED
- Displays the supervisory information in the Supervisory/Linkage Window, with the type of description description is programmed for example if Water Flow switch is monitored using monitor module, when it open and water flows, display screen show ' Water Flow Switch is open' (if this message is programmed).
- Sends fault message to history buffer, printer and repeater (annunciator panel), if

  installed

2.3.4.1 Action to Supervisory Event

Silence the Panel sounder : By pressing the soft key **Panel Buzzer Silence**, the local sounder will silence and the Supervisory LED will keep steady. By pressing this, panel will acknowledge the signal to panel screen, history buffer, printer and annunciator, if installed.

Investigate the condition which causes the supervisory condition. Check if any action is required.

Reset the Panel to normal condition : Once the supervisory condition is investigated and corrected to normal condition , to return the System to normal condition press **RESET** soft key on the panel.

2.3.5 Disable and Testing Event

2.3.5.1 Disablement and Testing of Device

When any point (detector or module) is isolated (disabled) or being tested individually, control panel indicates disabled points or testing condition by displaying on the screen its disabled or testing condition, respectively. It will not cause any alarm and if more than one point is disabled or tested, most recent one will be on top.

2.3.5.2 Disablement and Testing of Zone

When the complete zone(s) is(are) being disabled and tested, control panel indicates disabled points or testing condition by displaying on the screen disabled or testing condition, respectively.

- Yellow General Disable LED 'ON' for disablement of zone or any device disablement
- Yellow Test LED 'ON' for testing of zone or any device
- Display the message on GENERAL Window for the zone or device testing or disablement condition e.g. if zone 5 is disable, "Zone 5 is disable" will appear on the screen.

Note : Settings and procedure for testing and disablement are described in subsequent chapters

2.4 PRINTING REPORTS

Printing report can be obtained (if printer installed), which gives the information of all events occurred. Owner can keep the records for future analysis as History can store up to 1000 fire events.

CHAPTER 3
PROGRAMMING

3.1 PROGRAMMING FEATURE

Asenware AW-FP 100 Fire Alarm Control Panel is an intelligent panel which is carefully designed for to make it suitable for most of applications.It has following features which makes it user friendly :

- Local Programming : can be programmed locally at the panel which reduce installation time
- Easy to use software which can be handles by user who don't have any programming experience
- Large touchscreen LCD display , which can show Fire, Supervisory and Fault signal at same time. Moreover, ant testing and disablement can be displayed without losing any mandatory function.

3.2 NAVIGATING MENU AND OTHER PROGRAMMING SCREEN

As described in previous section (2.2.1), by pressing **MENU** soft touch button User may enter for other functions for programming and settings.

3.2.1 Recommendation Programming Procedure

Before programming, it is highly recommended to follow below procedure to prevent errors which can lead to reprogramming and wasting time.

- Make the record sheet for exact information of all devices , annunciator (repeater), and zones decision . An carefully assign addresses to all devise.
- Assemble an apply power to panel, and check that if all board are securely installed.
- Read this manual before programming.
- Change password for administrator and super administrator.
- Enter network panel parameters like time and date etc.
- Program all devices and test the system. test can be performed using point to point from the testing method as describes in subsequent sections of this chapter.
- Keep the hard copy of the program
- Save the program and also it can be upload to Asenware Server using Cloud System.

3.2.2 Password Change

As described in section 2.2.3.1 how to change the password, PASSWORD CHANGE touch button will help the user to change or update the password. There are usually two- levels of password : Administrator and Super- Administrator. Administrator can be described as Level 2 User, and Super Administrator as Level 3 User according to EN 54-2. Super-Administrator have access to modify the programing and registering the panel.

Panel is factory set for Administrator Password : 0000 and Super Administrator : 1111, which need to be modified by the user after received.

Note : Password should contain only 4 digits from 0-9.

After making all changes to the password as described in 2.2.3., save it into the system.

3.2.2.1 Incorrect or Forgotten Password

If the entered password is incorrect, panel will give the message INVALID PASSWORD. After escaping from this dialog, password can be re-entered. In case, if user forget the password, it can be recovered from USER LIST which is accessed by Level 4 (Owner, Developer or the person who is trained and authorized to make any changes) authorized access. How to access is explained later in this chapter.

3.3 PROGRAMMING

As mentioned in previous sections that there are two access level for programming i.e. Program and Status Modification.

In Program, user can register the devices wafter allocating the addresses, zone settings, system functions and other changes. Only Super Administrator (Level 3) is authorized to make these changes.

In Status Modification, user can make password changes, Test etc. Administrator or Super Administrator (Level 2 or Level 3 Access) person is authorized to make these changes.

3.3.1 Program

Program of the panel allows the user to make the programming as a whole for the system.

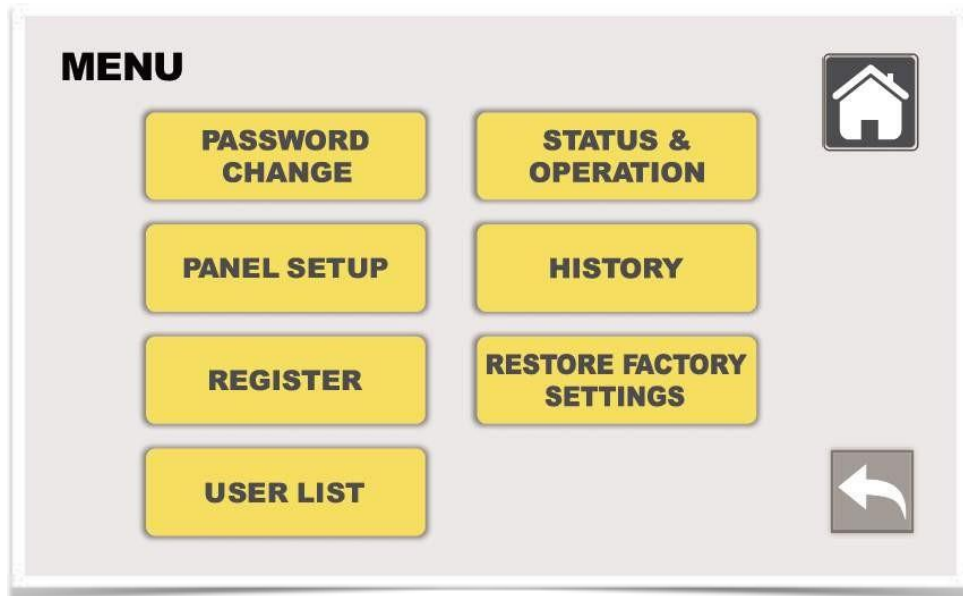When the user entered the **MENU** soft touch key, he/she can enter other sub-menus as described in **2.2.3**.

Figure 3.1 Main Menu Screen

3.3.1.1 Status and Operation

STATUS & OPERATION sub-menu allows the user to check the status of each address with location information. It can be seen from the Figure 3.2, that it is possible to test and isolate the individual device from this sub-menu.

In the Figure 3.2, column 1 tells about the address of the device and subsequent columns about device types, location and zone number. It is possible to Test and Disable the individual device using ON/OFF slide touch switch as shown in the last two columns, respectively. To check the status for particular loop can be selected from the Loop number at the top on the left side of this window, green right click implies the current selected loop. Pressing the soft touch button particular loop can be selected or dis-selected. Status also shows, if particular device is in normal condition or having any fault. UP/DOWN arrow can be used to go to next page, or page number can be selected from the bottom left Page Selection touch button.
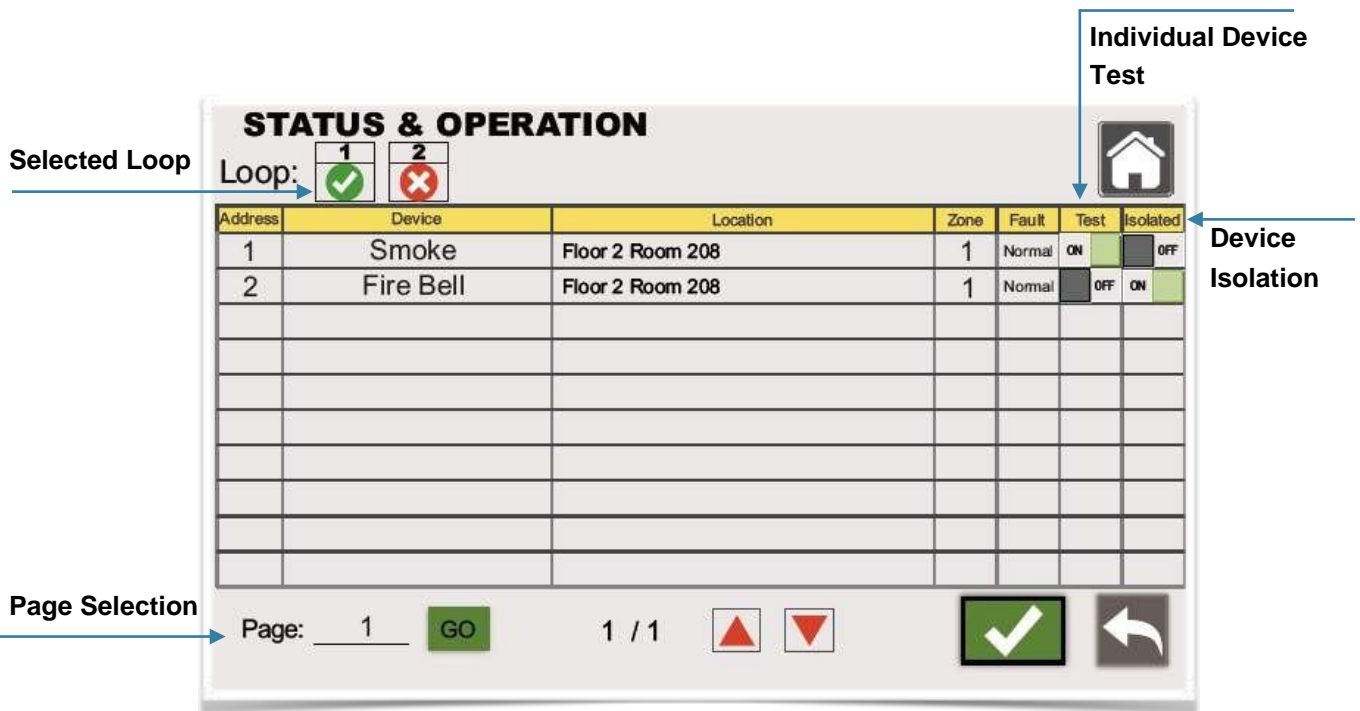
Individual Device Test

STATUS & OPERATION

Selected Loop

Loop: 1 ✓ 2 ✗

Address	Device	Location	Zone	Fault	Test	Isolated
1	Smoke	Floor 2 Room 208	1	Normal	ON OFF	
2	Fire Bell	Floor 2 Room 208	1	Normal	OFF ON	

Device Isolation

Page Selection

Page: 1 GO   1 / 1 ▲ ▼   ✓ ↩

Figure 3.2 Status and Operation Menu Screen

3.3.1.2 Panel Setup

Sub-menu **PANEL SETUP** allows the user to configure the panel for time set up, loop identity, zone settings etc. Panel Setup contains four other sub-menus, where user can set-up the panel by allocation the initial information.

PANEL SETUP

CONFIGURATION   ZONE SETTING

COMMUNICATION   DEVICE SETTING

Figure 3.3 Panel Setup Screen

3.3.1.2.1 Configuration

In this sub-menu, panel name, loop selection and its settings can allocated. Figure 3.4 shows the configuration window, where user can set up basic functions for the panel like time set-up, printer and panel buzzer sound.

First row is used to fill the name of the panel, and then number of loops which are wired within the panel can be selected. Screen Saver time can be adjusted, screen will go to sleep after this time to save energy. From **Buzzer** option panel sound can be enable and disabled from ON/ OFF touch slide switch. Similarly, printer can be online and offline using ON/OFF touch slide switch. In the Time Setup field, date and time can be set-up. After making these changes, save these changes by pressing the 'green right click' on the right side of the window.
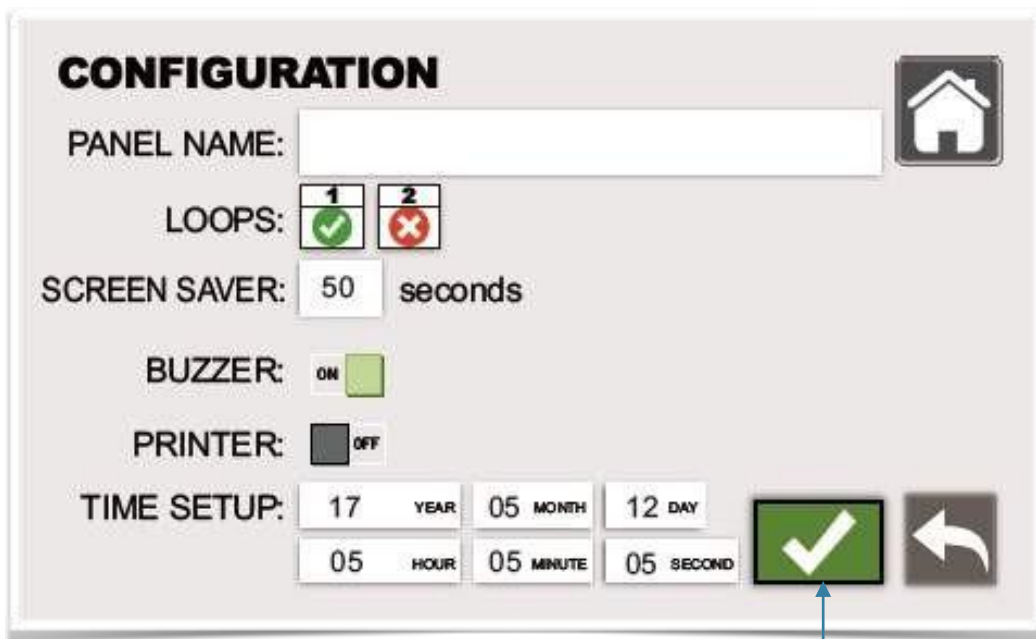

Figure 3.4 Configuration Window   **Click Here to Save**

3.3.1.2.2 Zone Settings

In this sub-menu of Panel Setup, user can see the status of zone as per the programming performed (Refer **REGISTER** in later section). This window gives the information about each zone like delay time, testing condition and disablement of zone, if any. FireQty tells about number of devices needed to initiate notification applies to avoid false alarm.
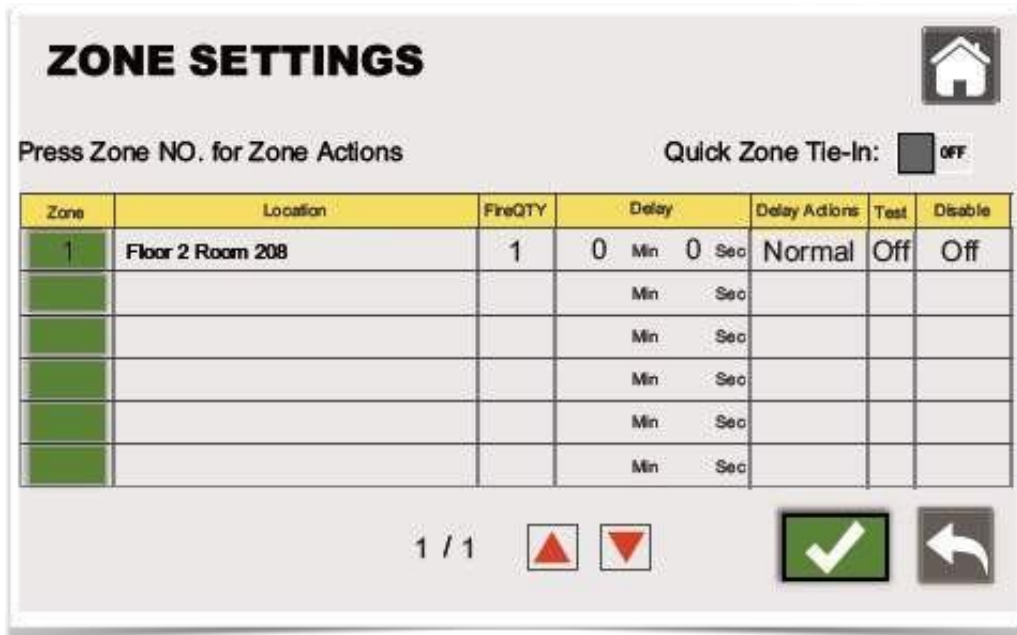
Figure 3.5 Zone Settings Window

If there is no delay in particular zone, status will show that the panel is normal for any output, it will give the signal to Notification Appliances without any delay.

In the first column of Figure 3.5, Zone number are soft touch button, when pressed, it will take the user to Zone Action settings windows, Figure 3.6. In this window, user can name the
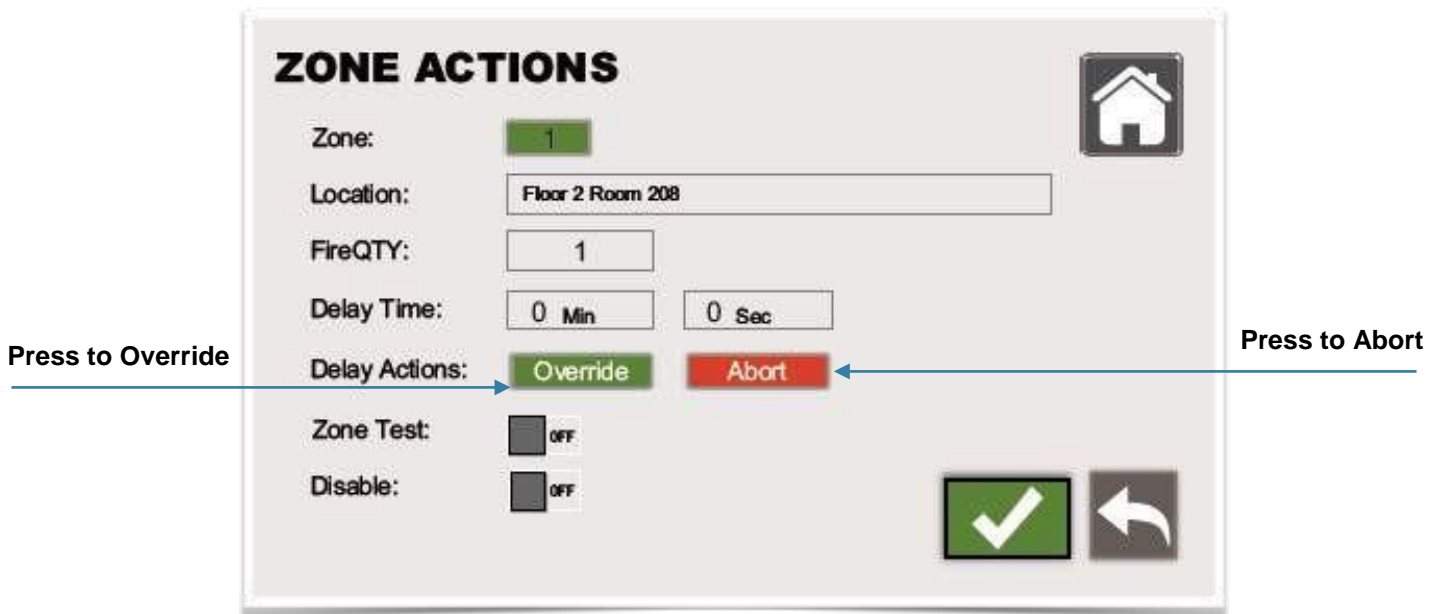

Figure 3.6 Zone Settings Window

zone in 'Location' and FireQty can be selected up to three devices to avoid false alarm as shown in Figure 3.7. User can select the number of devices required to allow the panel to send output signal to Notification Devices in the specific zone.

Delay time for the particular zone can be set up to 10 minutes with maximum 60 seconds of interval, refer Figure 3.8 (A) and (B).

There are options to override or abort the the zone fire signal, refer Figure 3.6. If panel received the signal from the device, and user find out if this is real fire, then user need not to wait until delay time over, in this case he can press **Override** soft touch key. And if user find out that its a false alarm, during delay time, user can abort the system using **Abort** soft touch key.

Zone testing and zone isolation is possible using ON/OFF slide switch button. Complete zone can be tested and disabled and it will be notified in the previous window as shown in Figure 3.5. Table 3.1 shows brief summery of zone actions functions.
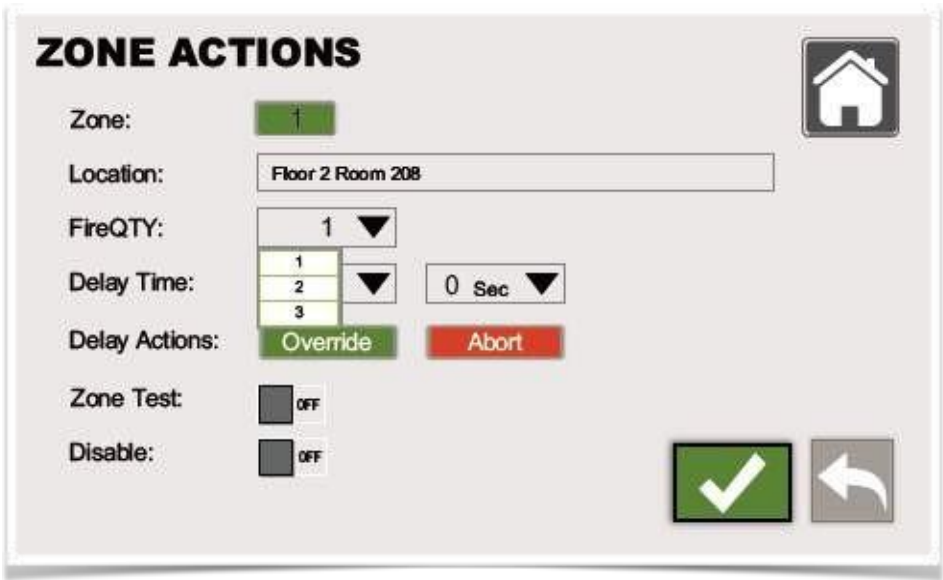

Figure 3.7 Setting the Fire Qty

Table 3.1 Zone Actions

| ACTION	DESCRIPTION	NOTIFICATION
Delay Time	Can be set up to maximum 10 min	It will appear on Zone Settings window
Delay Actions	Override to avoid delay time during real fire	Appear on Home screen in General Window as well as in Zone setting window
	Abort to call off the in case of false alarm	
Zone Testing	Individual Zone testing	Appear on Home screen in General Window and in zone settings it will show its status
Disablement	Individual Zone disablement or isolation	
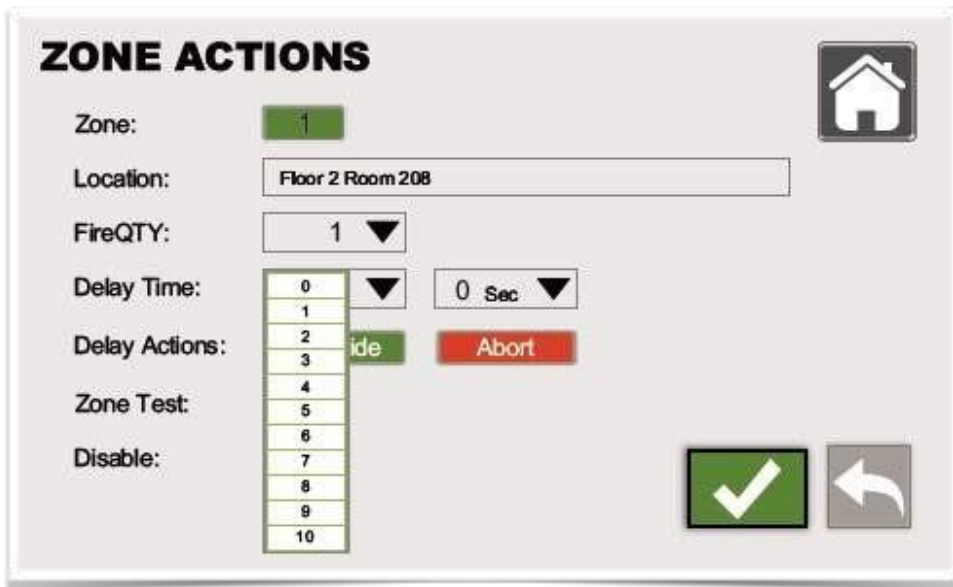
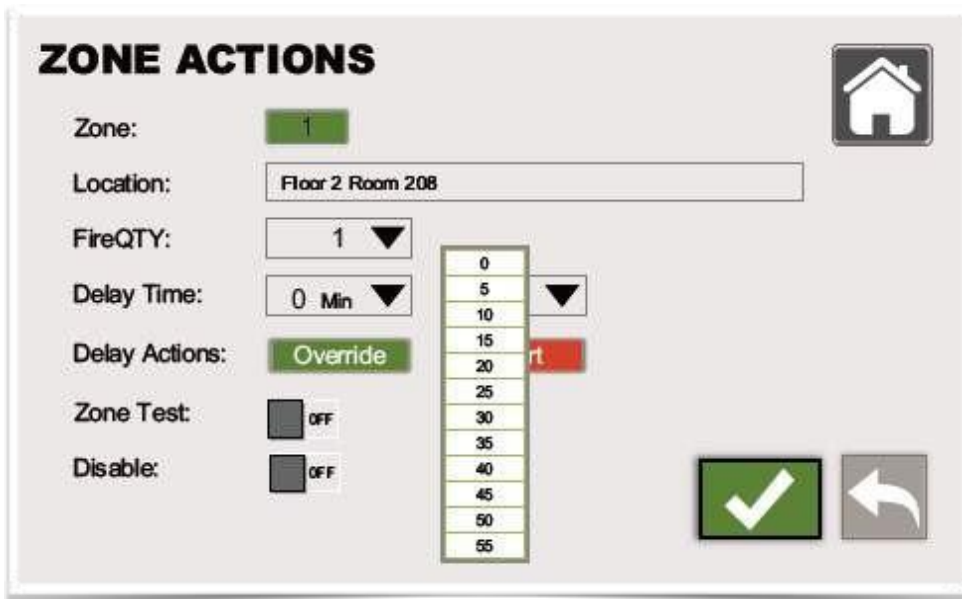**Figure 3.8 (A) Delay Time Settings (Minute)**

Figure 3.8 (B) Delay Time Settings (Minute)

3.3.1.2.3 Communication

Network settings and, communication settings with other panels and cell phones can be performed in this sub-menu. Referring to Figure 3.9, user must go further individual widows for above mentioned settings.

Figure 3.9 Communication Window

3.3.1.2.3.1 TCP/IP ADDRESS

Asenware AW … can be connected through network, using the IP Address and DNS server settings, network communication can be established. User has to fill the information in the sub-menu TCP/IP ADDRESS as shown in Figure 3.10.

3.3.1.2.3.2 CAN

CAN window allows the user to connect with other panels, 'right green click' represent the selected loop and 'red cross click' represents not connected to the current panel, refer Figure 3.11.

3.3.1.2.3.3 Cloud

Asenware allows the customer to save the data using Cloud option, refer Figure 3.12, all data (programming) will be saved at Asenware Server. It will help the user to restore the data from Asenware Server and on request Asenware can check for any issues in the programming at any time.

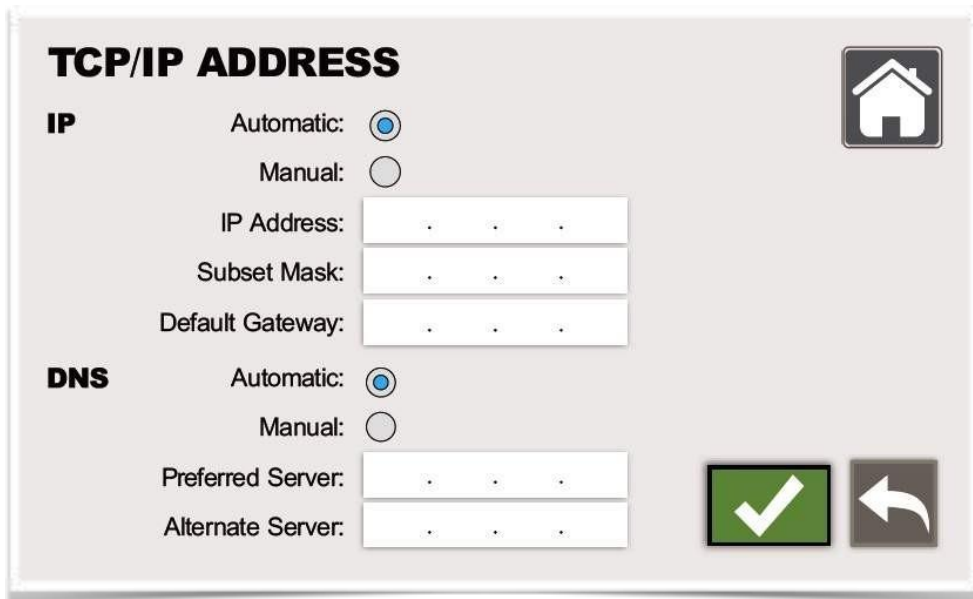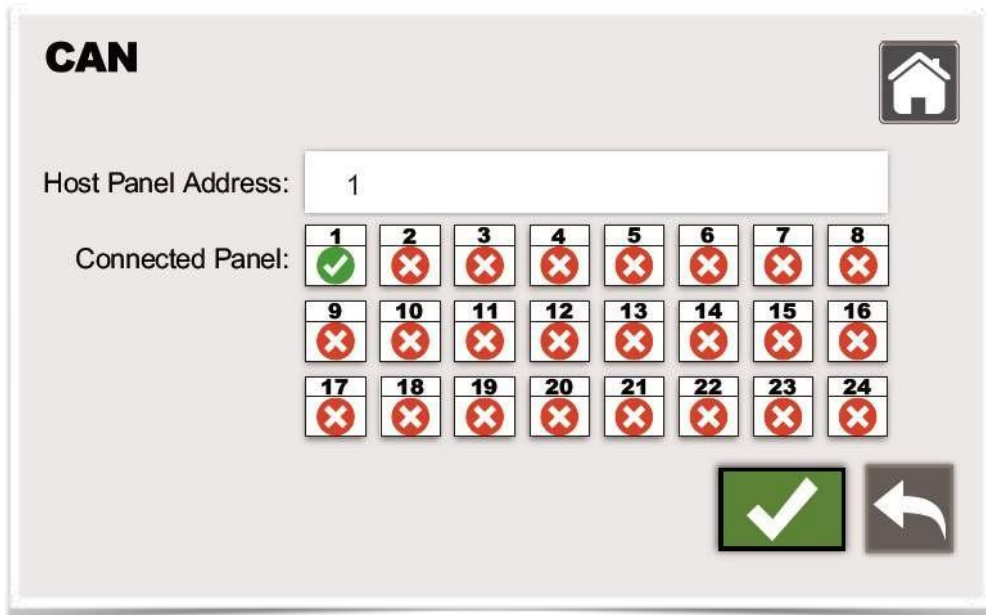**Figure 3.10 TCP/IP Address Window Screen**

Figure 3.11 CAN Window Screen

Figure 3.12 Cloud Window Screen

3.3.1.2.3.4 GSM

In this (GSM) window, refer to Figure 3.13, users can feed the Phone number of authorized persons or the person to be notified for the event for example notification for the person in control room, fire brigade office etc.
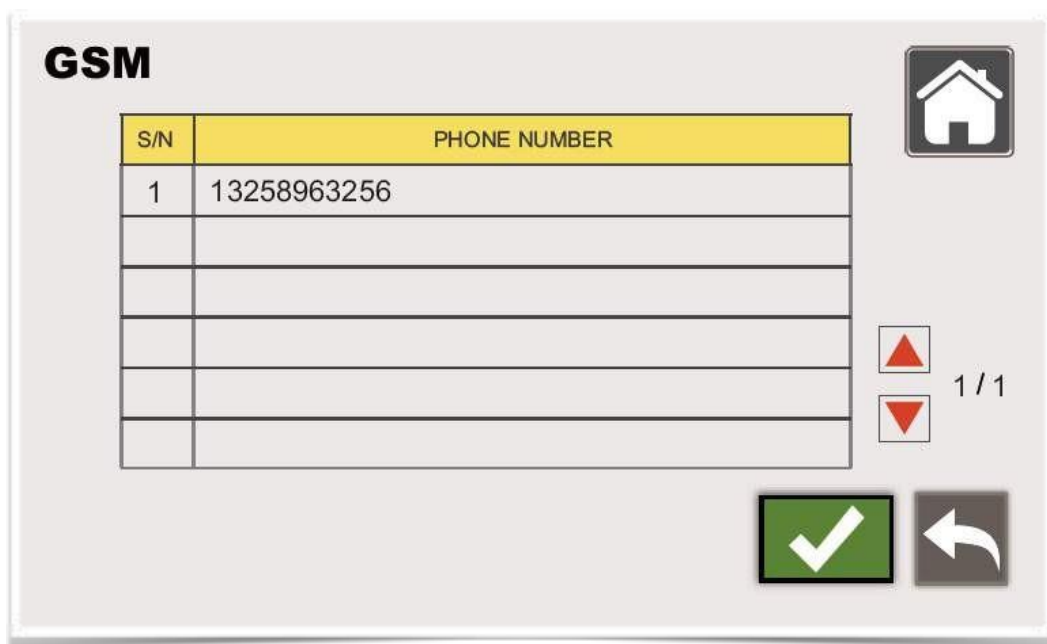

Figure 3.13 GSM Window Screen

3.3.1.2.4 Device Settings

In this sub-menu of PANEL SETUP, user can define and assigned the devices name which can be configured in **Register** (described in later sections). Figure 3.14 shows the Device Settings window.
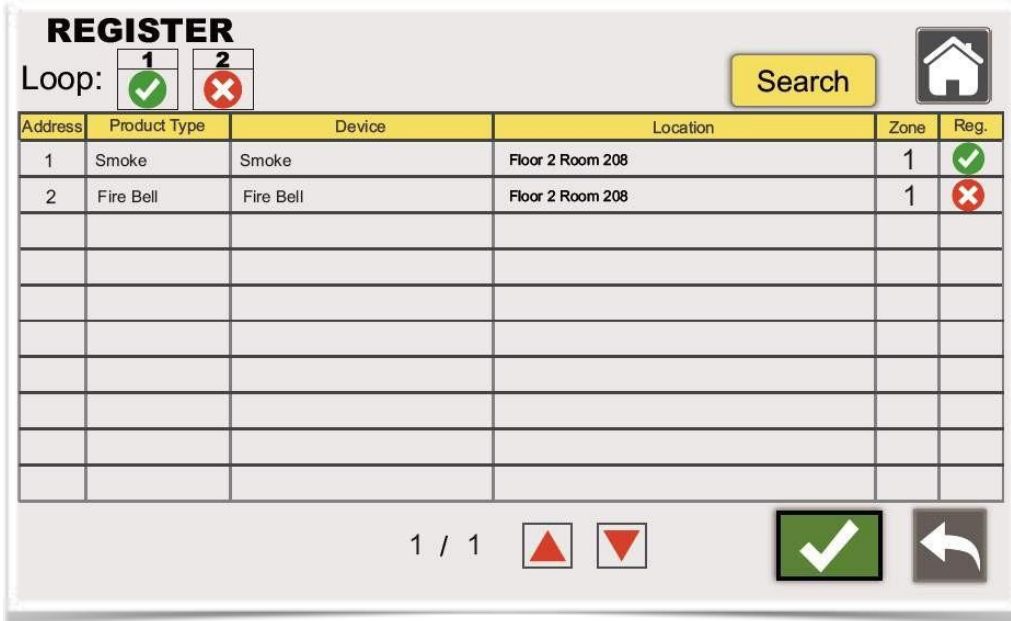

Figure 3.14 Device Settings Window Screen

3.3.1.3 Register

Sub-menu REGISTER is the most important window for programming. In this sub-menu, user can assign the addresses, product type, devices and location to all devices. In the address column, user can assign the addresses which he/she planned for each devices e.g smoke detectors, heat detectors, monitor modules etc.

As shown in Figure 3.15, window has information for all devices's addresses , location and status, if it is registered or not.

Note : Before making any input in this window, user is highly recommend to assign zones, addresses and thoroughly planned layout must be filled in sheet(s).

Suggested Procedure :

Step 1 : Choose the Loop first to which user is going to assign addresses. 'Green right click' represents selected (current loop) and 'red cross' means this loop is not selected at this moment, refer Figure 3.15.

Step 2 : It is presumed that user already assign addresses to the devices using the suitable method, here in column

Step 3 : When address is assigned to specific device, in the second column Product Type can be selected from the drop down list as shown in Figure 3.15 after clicking anywhere in the cell. Type of product , like smoke, heat or combination etc. can be assigned depends on the device type which is Step 4.

Step 4 : In the Device column, device name can be selected after clicking anywhere in the cell, refer Figure 3.15. It will give you the list of the Device Names, which you already provided in Device Settings (**3.3.1.2.4**). It will automatically show its zone number.

Step 5 : When all data for the particular address is filled in the specific fields, from the last column (Reg.), user can register the device by clicking the 'Red Cross Click'. It will become 'Green Right Click' which represent that specific device is registered and it is online now.
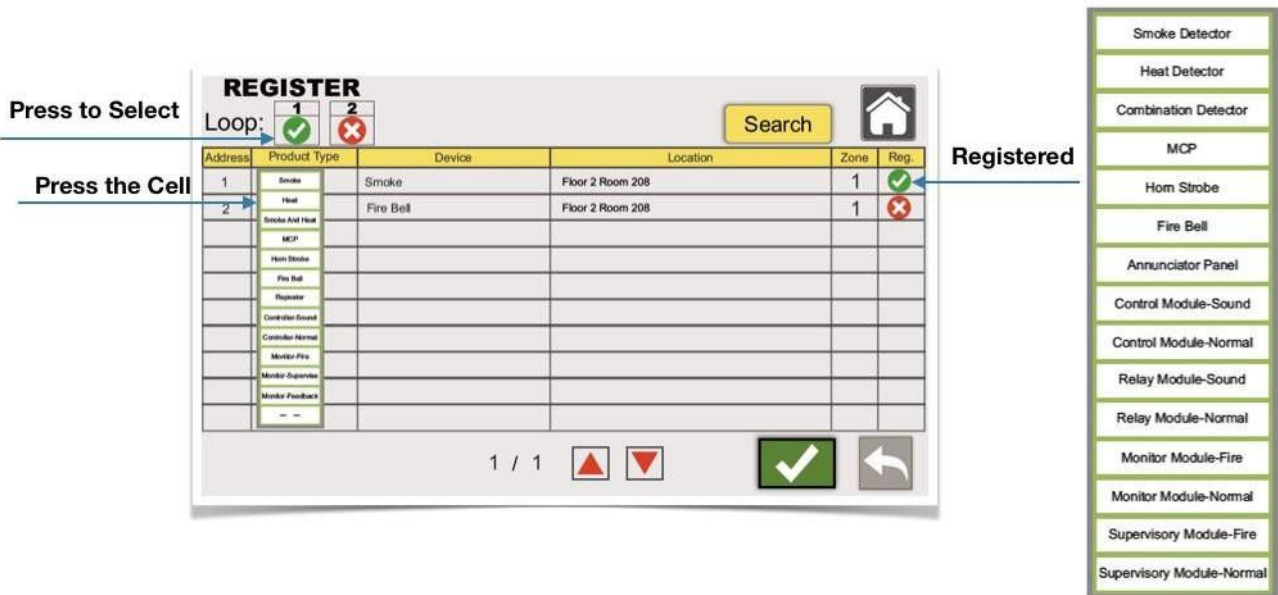

Figure 3.15 Selection of Product Type

Note: Refer Appendix C for assigning the addresses to the devices.
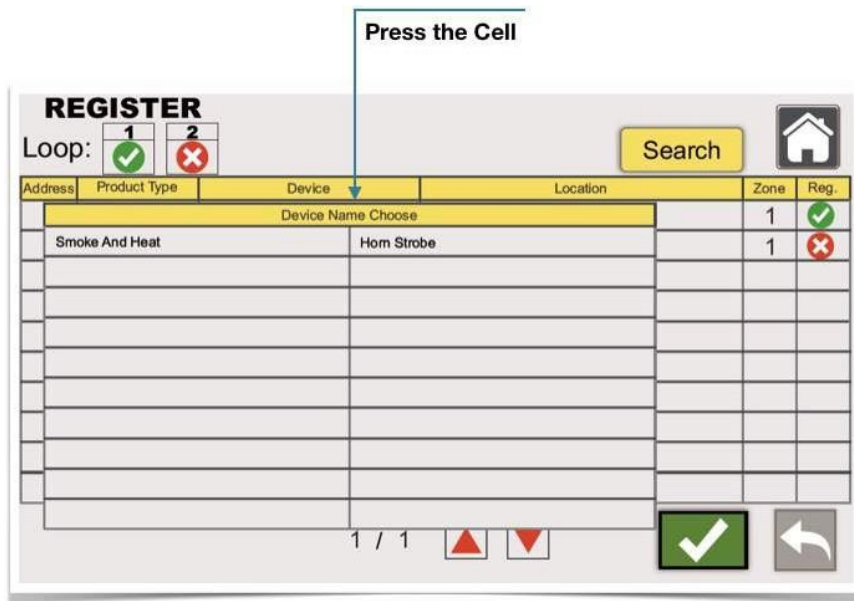
Figure 3.16 Selection of Device and Register

3.3.1.4 Restore Factory Settings

Sub-menu **RESTORE FACTORY SETTINGS** allows the owner to make the panel at factory settings and reset the panel as per new configuration or new programming for the devices. Only Level 4 authorized person can use this sub-menu.

3.3.1.5 User List

In case if user (Level 2 and Level 3) forget password the sub-menu **USER LIST** can help them to recover the password. Only Level 4 authorized people can access to this sub-menu. As shown in Figure 3.17 all level password can be seen here once it is programmed.

There is **Help** touch button in this sub-menu, which allows the user to check the access authorization for the particular functions of the panel, refer Figure 3.18.

USER LIST

User Level	Name	Password
Level 1	Normal User	None
Level 2	Administrator	
Level 3	Super Administrator	
Level 4	Programer	

Help
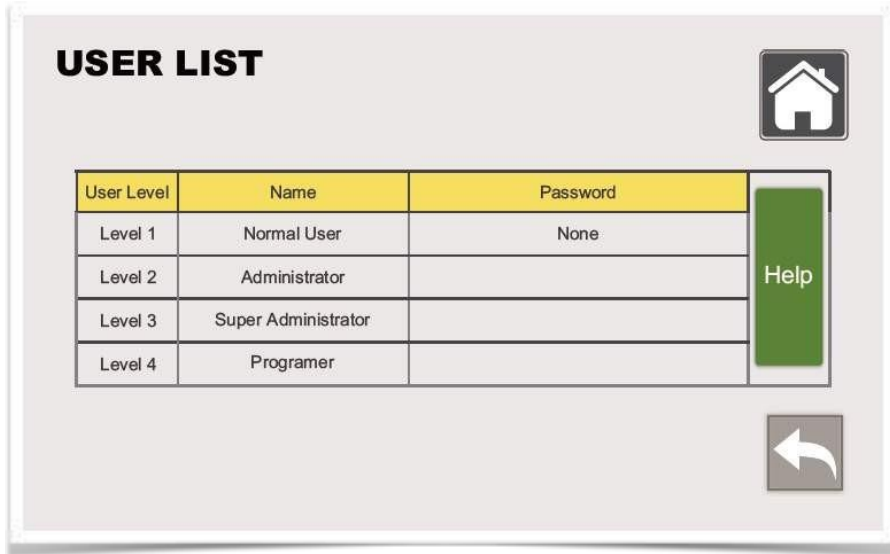
Figure 3.17 User List

Items	Level 1	Level 2	Level 3	Level 4
General Response to Alarm or Fault	✓	✓	✓	✓
Silence to Alarm or Fault	✗	✓	✓	✓
Lamp Test	✓	✓	✓	✓
Operate to Power Condition	✗	✓	✓	✓
Operate to Fire Alarm Condition	✗	✓	✓	✓
Operate to Fault Condition	✗	✓	✓	✓
Operate to Disable Condition	✗	✓	✓	✓
Operate to Test Condition	✗	✓	✓	✓
Reset	✗	✓	✓	✓
Delay Settings	✗	✗	✓	✓
Zone Coincidence Fire Quantity	✗	✗	✓	✓
Addresses Registration	✗	✓	✓	✓
Override Manual Call Point	✓	✓	✓	✓
History Counter	✗	✗	✗	✓
Forgot Password Configuration	✗	✗	✗	✓
Programming/Firmware Change	✗	✗	✗	✓

Figure 3.18 User Access Chart

Any question concerning the technical or related to this manual should be addressed to :

Asenware Ltd.
701 Building 8,
Dongfangming Industry Zone
Dabao Road, Baoan, Shenzhen, China

APPENDIX A
# COMPITIBLE DEVICES

A.1 ANNUNCIATOR PANEL

Asenware D116 Remote Annunciator is used with FP10 Series Intelligent Fire Alarm Control Panel. LCD screen with backlight makes it convent to know the location of the event more precisely. D116 is provided using an 80 character, back-lit, alphanumeric display. Information Messages includes for **Alarm**, **Fault**, **Supervisory** and **General Conditions** in a clear and descriptive English Language. LEDs for Fire, Supervisory and Alarm are also provided with ACK push button. From the Silence push button, panel and Remote Notification appliances can be silenced. D116 is fully complied with the requirement of EN 54-2 and EN 54-4. From Remote Annunciator, Notification Devices can be silenced and acknowledged to main control panel.

Table A.1 Annunciator Panel

FEATURES
Two Lines of 40 Character each LCD
LED Indication for Alarm, Fault and Supervisory
Push Buttons to acknowledge the silence
Lamp Test from Key Switch
IP 30 Cabinet
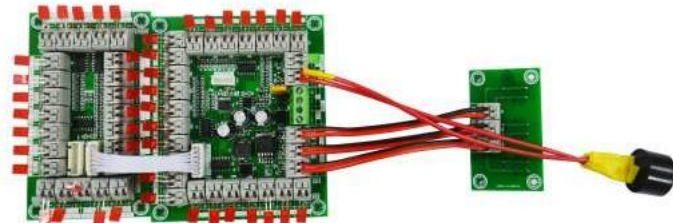
A.2 ADDRESSABLE ANNUNCIATOR BOARD

Asenware AW-D117 Addressable annunciator board is a 24 Zone Board, which can be configured at the site as per the Fire Alarm System Layout drawing. It includes keyboard, Power LED and buzzer. AW-D118 is extensions 24 zone board. Both can be used with AW-FP100 Series Addressable Fire Alarm Control Panel. One AW-D117 can be connected with 4 pieces of AW-D118 for maximum 120 zones.

A.3 ADDRESSABLE DEVICES

Asenware provides addressable initiating and notification devices which are compatible with AW-FP100 Series Addressable Fire Alarm Control Panel Series.

Table A.2 Devices

Model Number	Devices
AW-D101	Addressable Smoke Detector
AW-D102	Addressable Heat Detector
AW-D103	Addressable Combination Detector (Heat & Smoke)
AW-D105	Addressable Manual Call point
AW-D106	Addressable Strobe Sounder
AW-D109	Addressable Bell
AW-BS01	Detector Base

A.4 MODULES

All addressable modules are compatible with AW-FP100 Series Addressable Fire Alarm Control Panel. It is supplied with back box and cabinet which has IP30 rating. All devices have two panel controlled LED indicators, one Green LED which keep showing the power and another one is RED LED which goes ON at the time of Alarm Condition.

Table A.3 Modules

Modules	Model Number	Function
Monitor Module	AW-D110	Monitor the individual devices
Supervisory Module	AW-D111	Monitor the supervisory devices and status of devices
Control Module	AW-D112	Provide switch and external power supply
Relay Module	AW-D113	Provide contact to equipments with address
Isolator Module	AW-D114	Enable continuing operation of the communication loop when a short circuit occurs

APPENDIX B
DATASHEETS

ADDRESSABLE SMOKE DETECTOR

General

Asenware AW-D101 smoke detector is an intelligent smoke detector, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific detector location (point). It reduces the maintenance cost and makes it easier to maintain the system.

Features

- Addressable-analog communication
- Low standby current for continuous monitoring (≤2.5mA)
- Two-wire connection
- Two LEDs (RED), blinks in normal condition and becomes stationary during fire
- Remote test from Panel

Spacing

Spacing of detector must be followed by standard EN 54 or NFPA 72. NFPA 72 suggests for low airflow application spacing of 9.1 m for ceiling height up to 3.15 m can be applicable. However, please follow the specific codes and local codes for specific applications.

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 2.5mA
Alarm Current	≤ 3 mA
Smoke Sensitivity	0.1~ 0.15dB/m
Work Temperature	-10℃~50℃
Size	99.80 mm

Installation

AW-D101 addressable detector use a separate base to simplify the installation and maintenance. For proper installation, terminal connections to be followed as shown below

No 6: Remote Indicator+	No 3: Remote Indicator -
No 2: Loop IN +	No 5: Loop IN -
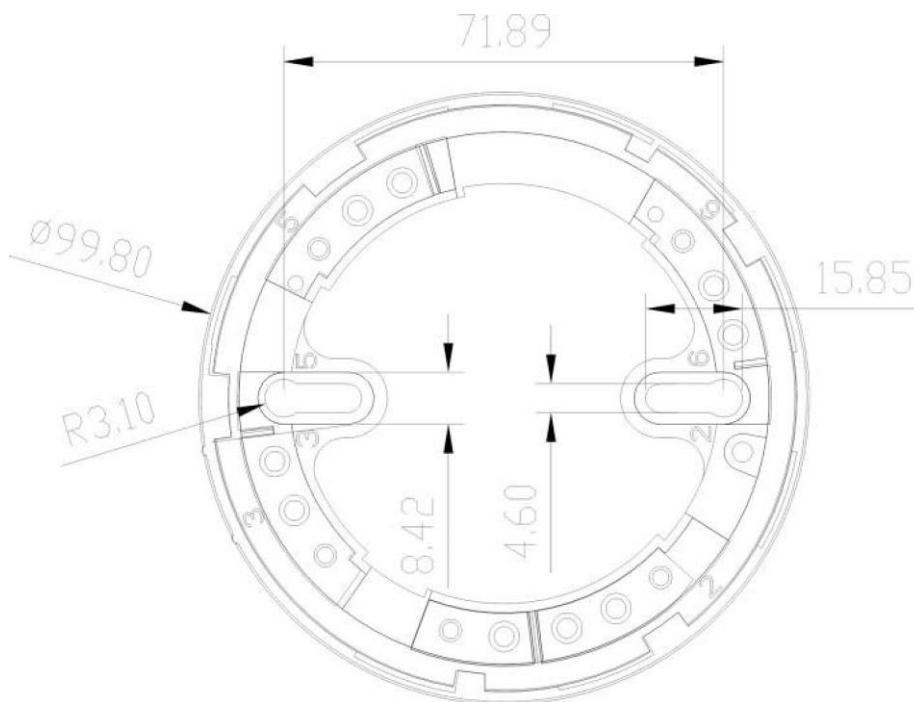
*All dimensions are in mm

ADDRESSABLE HEAT DETECTOR

General
Asenware AW-D102 heat detector is an intelligent rate of rise heat detector, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific detector location (point). It reduces the maintenance cost and makes it easier to maintain the system.

Features

- Addressable-analog communication
- Rate-of-rise feature activates when ambient temperature increases at the rate of 7.1 ℃ /5S
- Low Standby current
- Two-wire connection
- Two LEDs (RED), blinks in normal condition and becomes stationary during fire alarm condition.
- Remote test from Panel

Spacing
Spacing of detector must be followed by standard EN 54 or NFPA 72. N FPA 72 suggests for low airflow application spacing of 9.1 m for ceiling height up to 3.15 m can be applicable. However, please follow the specific codes and local codes for specific applications.

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 2.5mA
Alarm Current	≤ 3 mA
Rate-of-rise Alarm	7.1℃/5S A2R
Work Temperature	-10℃~50℃
Size	99.80 mm

Installation

AW-D102 addressable detector use a separate base to simplify the installation and maintenance. For proper installation, terminal connections to be followed as shown below.

No 6: Remote Indicator+	No 3: Remote Indicator -
No 2: Loop IN +	No 5: Loop IN -
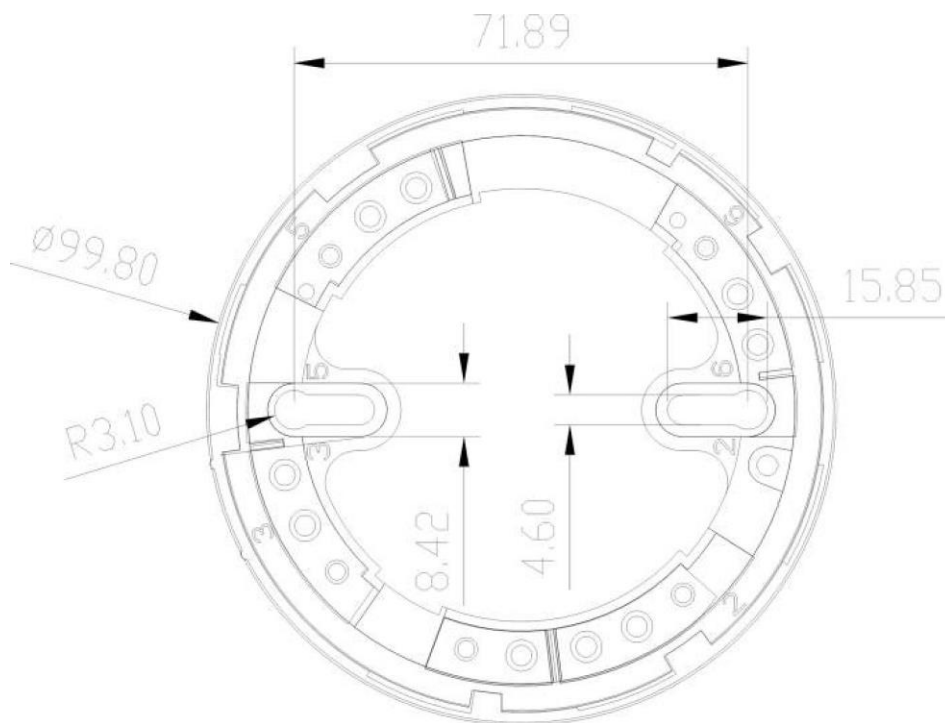
*All dimensions are in mm

ADDRESSABLE COMBINATION DETECTOR

General

Asenware AW-D103 is combination heat and smoke detector, it is an intelligent addressable detector, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific detector location (point). It reduces the maintenance cost and makes it easier to maintain the system. It provides fire signal when both conditions are satisfied which reduces the chances of false alarm. The heat sensing portion utilizes a proven thermistor for accurate and reliable heat detection.

Features

- Addressable-analog communication
- Low standby current for continuous monitoring (≤2.5mA)
- Two-wire connection
- Two LEDs (RED), blinks in normal condition and becomes steady during fire alarm condition.
- Remote test from Panel

Spacing

Spacing of detector must be followed by standard EN 54 or NFPA 72. NFPA 72 suggests for low airflow application spacing of 9.1 m for ceiling height up to 3.15 m can be applicable. However, please follow the specific codes and local codes for specific applications.

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 2.5mA
Alarm Current	≤ 3 mA
Smoke Sensitivity	0.1~ 0.15dB/m
Fix Temperature Range	57℃
Rate of rise alarm	7.1℃/5S
Work Temperature	-10℃ ~50℃
Size	99.80 mm

Installation

AW-D103 addressable detector use a separate base to simplify the installation and maintenance. For proper installation, terminal connections to be followed as shown below.

No 6: Remote Indicator+	No 3: Remote Indicator -
No 2: Loop IN +	No 5: Loop IN -
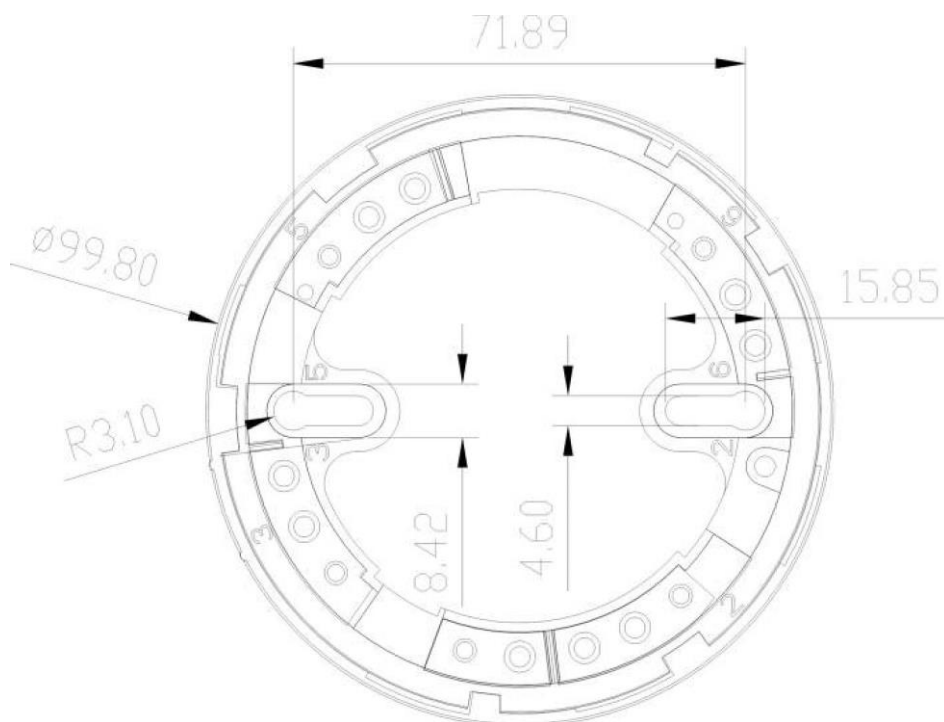
*All dimensions are in mm

ADDRESSABLE HORN STROBE

General

Asenware AW-D106 is an intelligent horn strobe, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific device location (point). AW-D106 horn strobe is used for audio and visual fire signaling applications.
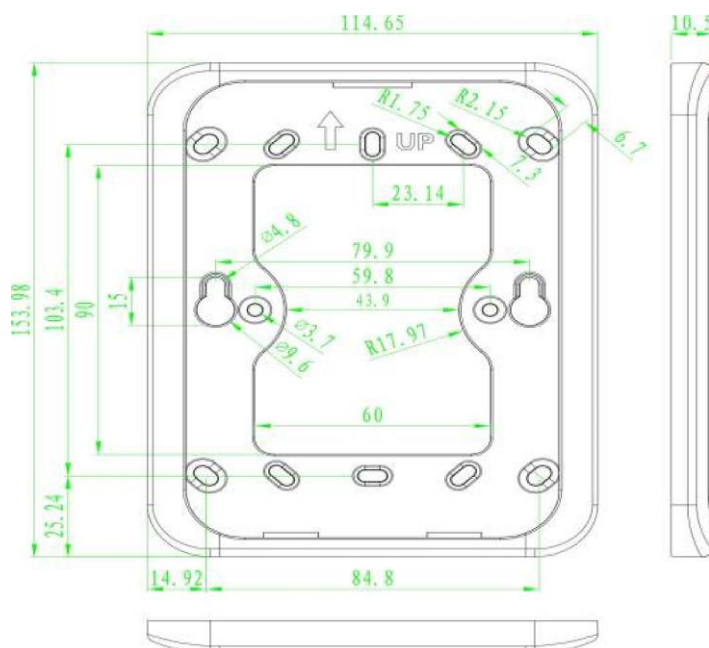
Features

- Addressable-analog communication
- Low Standby current
- High decibel rating
- Flash period of 1 sec

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 3 mA
Alarm Current	≤ 60 mA
Alarm SPL	≥100dB
Flash Period	1.0 Sec
Working Temperature	-10℃~50℃

Installation

AW-D106 addressable horn strobe comes with mounting enclosure which can be easily installed.

*All dimensions are in mm

ADDRESSABLE BELL

General

Asenware AW-D109 is an intelligent bell, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific bell location (point). AW-D109 alarm bells are low-current, high-decibel notification appliances for use in fire signaling applications.
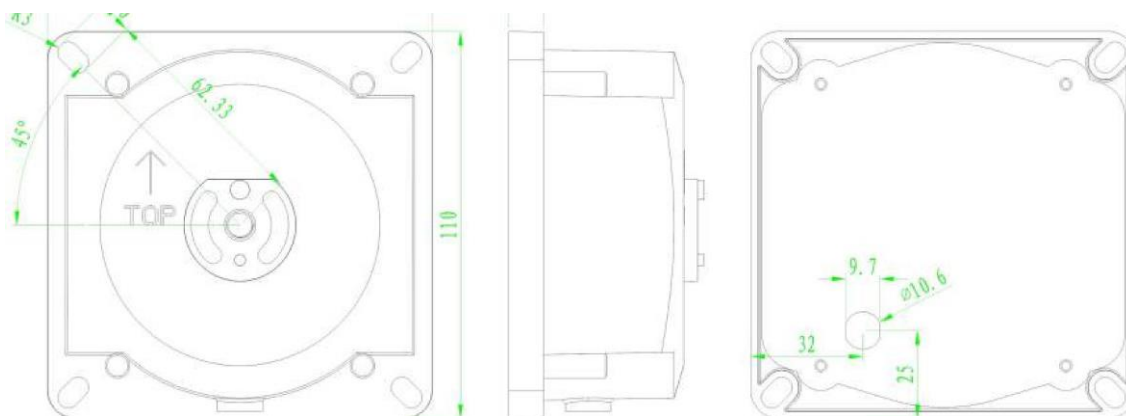
Features

- Addressable-analog communication
- Low Standby current
- High decibel rating

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 3 mA
Alarm Current	≤ 50 mA
Size	110 mm X 110 mm

Installation

AW-D109 addressable bell comes with mounting enclosure which can be easily installed.

*All dimensions are in mm

MANUAL CALL POINT

General

Asenware AW-D105 is an intelligent manual call point, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID, which allows the panel to continuously monitor specific device location (point). AW-D105 can be used to trigger the alarm manually in the fire emergency scenarios.

Features

- Addressable-analog communication
- Two LEDs (GREEN: Normal Condition and RED : Alarm condition)
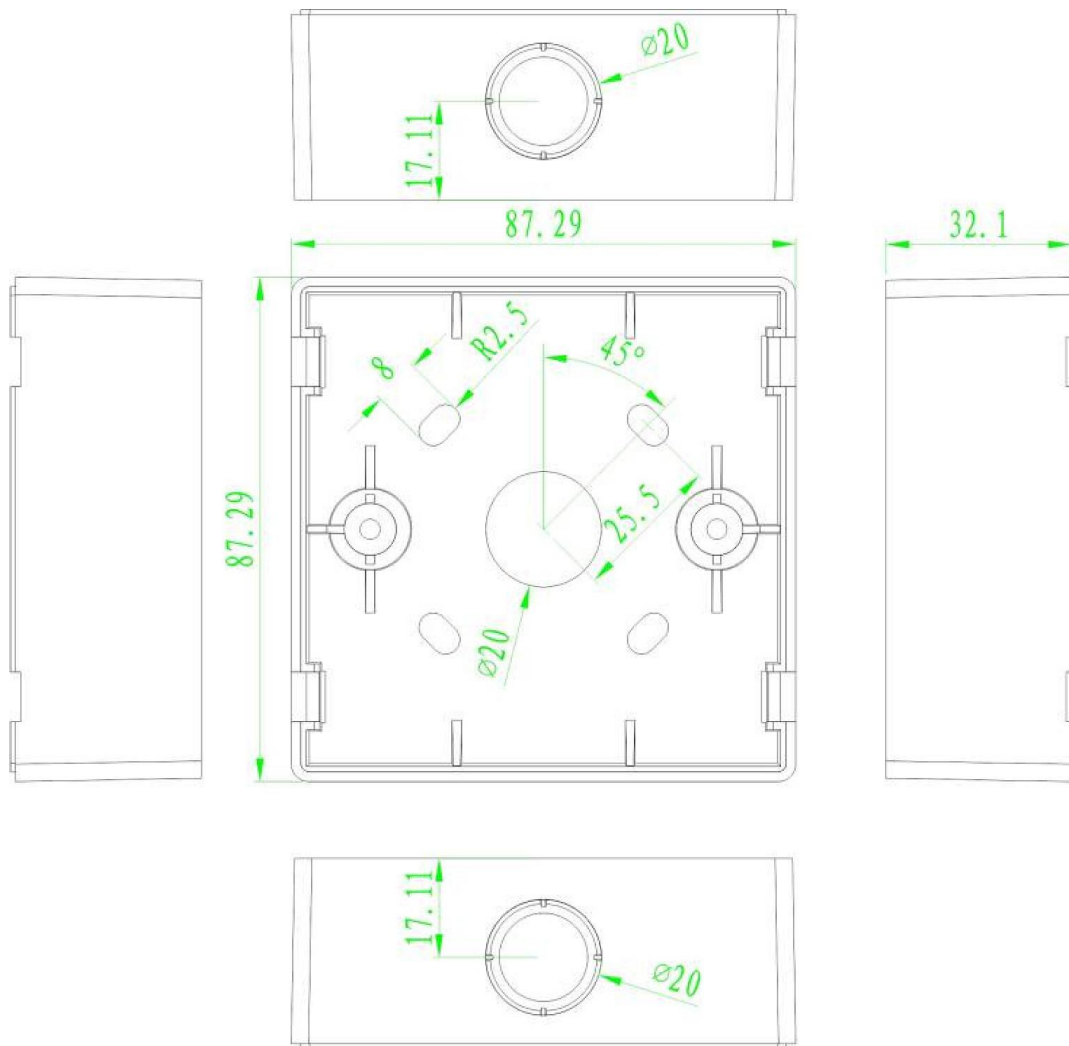- Can be reset easily

Parameters

Operating Voltage	18V~28V DC
Work Current	≤ 4 mA
Protection Level	IP 30

Installation

AW-D105 addressable call point comes with mounting enclosure which can be easily installed. It can be reset easily using the key (shipped along with the call point).
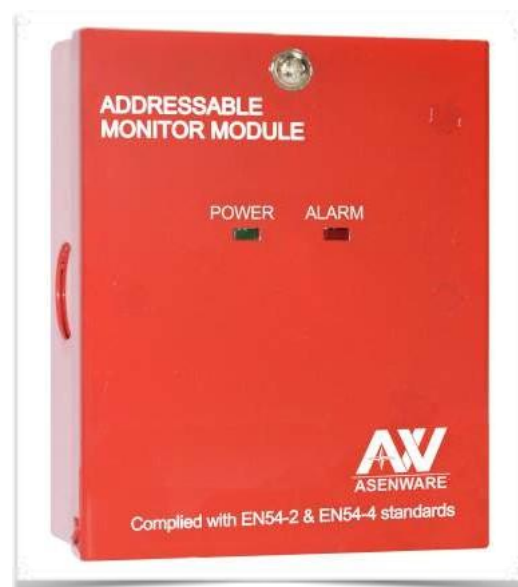
*All dimensions are in mm

MONITOR MODULE

General

Asenware AW-D110 is an intelligent addressable monitor module, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID or individual address, which allows the panel to continuously monitor specific location (point). The module has a panel controlled LED indicator.

Features

- Addressable-analog communication
- Two-wire connection
- Two LEDs one is Green, which blinks in normal condition and another one is Red which becomes steady during fire alarm condition.
- Remote test from Panel

Installation

- AW-D110 addressable monitor module must be installed as per the final drawings and wiring diagram.
- Set the address on the monitor module using programmer.
- Secure the module in the electrical box, supplied with the monitor module.

Parameters

| Operating Voltage	18V~28V DC
Standby Current	≤ 5mA
Alarm Current	≤ 25 mA
Protection Level	IP 30
Work Temperature	-10℃ ~50℃

Wiring Connection
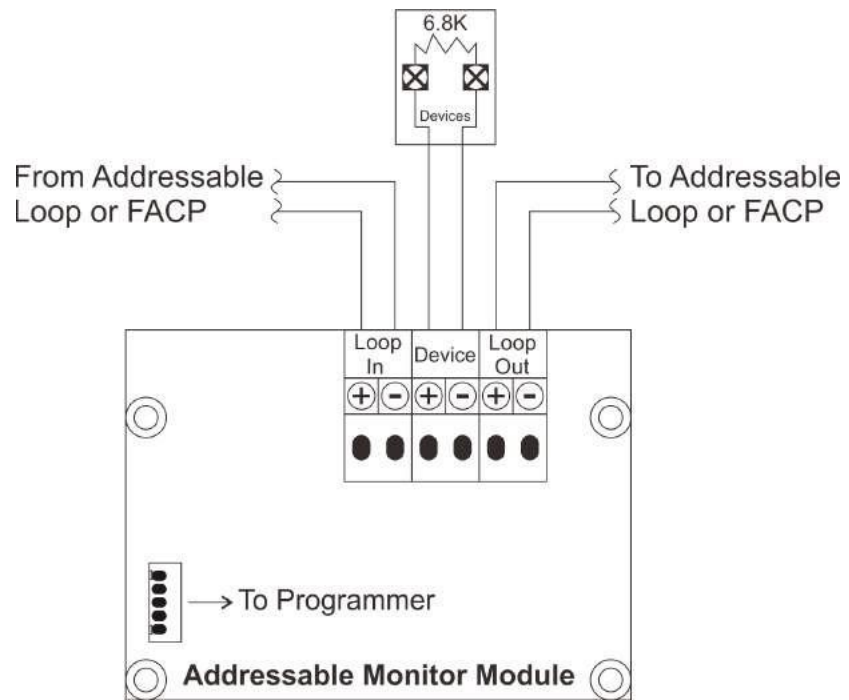
*All dimensions are in mm
* Same size of box is supplied for all type of modules

CONTROL MODULE

General

Asenware AW-D112 is an intelligent addressable control module, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID or individual address, which allows the panel to continuously monitor specific location (point). The module has two panel con- trolled LED indicator. AW-D112 control modules provides a notification circuit to control panel which allows to activate the notification devices i.e. horn, strobes etc.
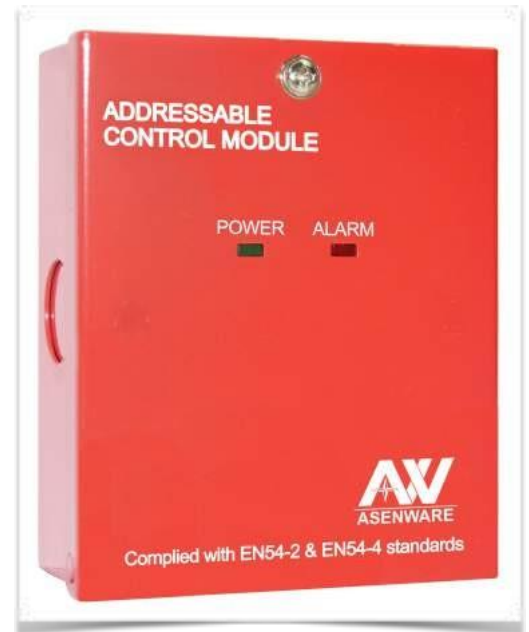
Features

- Addressable-analog communication
- Two-wire connection
- Two LEDs one is Green, which blinks in normal condition and another one is Red which becomes steady during fire alarm condition.
- Remote test from Panel

Installation

- AW-D110 addressable monitor module must be installed as per the final drawings and wiring diagram.
- Set the address on the monitor module using programmer.
- Secure the module in the electrical box, supplied with the monitor module.

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 5mA
Load Capacity	≤ 200 mA
Protection Level	IP 30
Work Temperature	-10℃ ~50℃

Wiring Connection
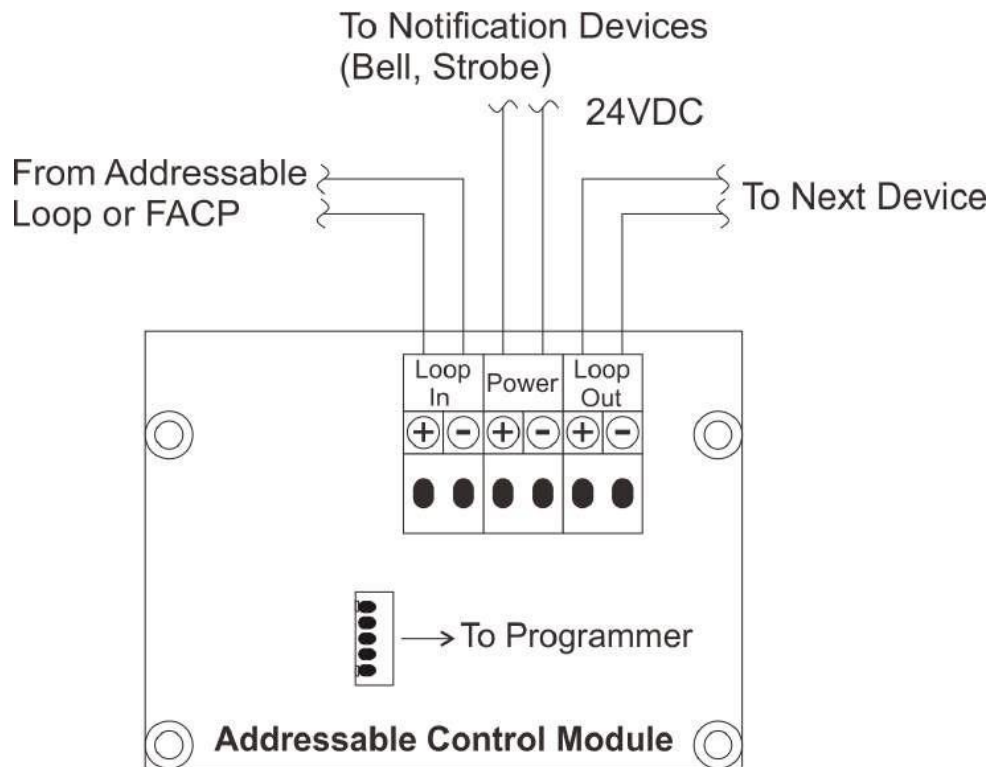
SUPERVISORY MODULE

General

Asenware AW-D111 is an intelligent addressable supervisory module, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID or individual address, which allows the panel to continuously monitor specific location (point). The module has two panel con- trolled LED indicator. AW-D111 supervisory modules continuously monitors the supervisory devices like control valves, zone valves etc.

Features

- Addressable-analog communication
- Two-wire connection
- Two LEDs one is Green, which blinks in normal condition and another one is Red which becomes steady during fire alarm condition.
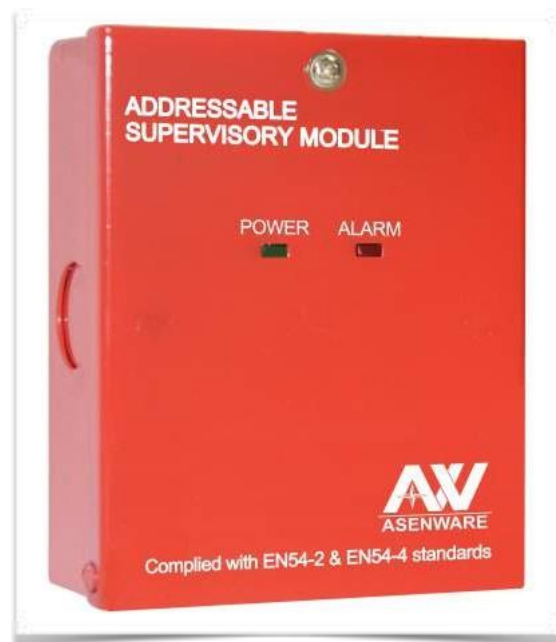- Remote test from Panel

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 5mA
Aux Output	≤ 200 mA @24 VDC
Supervisory Contact	Dry Relay
Protection Level	IP 30
Work Temperature	-10℃ ~50℃

Installation

- AW-D111 addressable monitor module must be installed as per the final drawings and wiring diagram.
- Set the address on the monitor module using programmer.
- Secure the module in the electrical box, supplied with the monitor module.

Wiring Connection

To Supervisory Equipments (Flow Switch etc.)

From Addressable Loop or FACP

To Addressable Loop or FACP

Loop In | SUPV | AUX 24V | Loop Out

To Programmer

Addressable Supervisory Module

RELAY MODULE

General

Asenware AW-D113 is an intelligent addressable relay module, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID or individual address, which allows the panel to continuously monitor specific location (point). The module has two panel con- trolled LED indicator. AW-D113 control modules provides the system with a dry-contact output for activating a variety of auxiliary devices, such as fans, dampers, control equipment, etc.

Features

- Addressable-analog communication
- Two-wire connection
- Two LEDs one is Green, which blinks in normal condition and another one is Red which becomes steady during fire alarm condition.
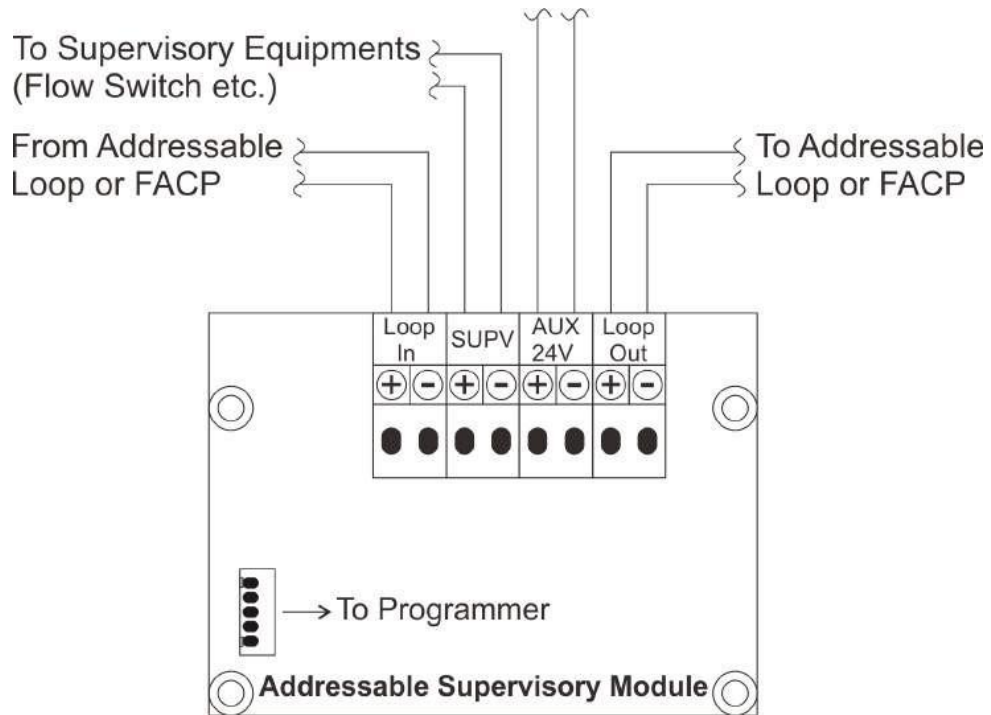- Remote test from Panel
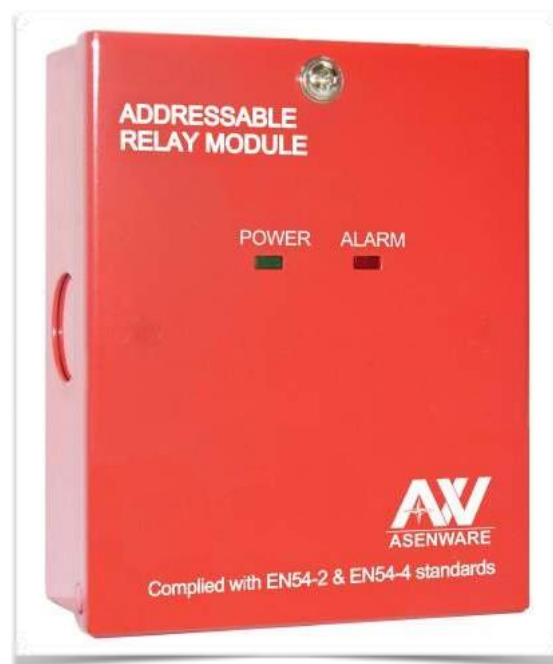
Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 3mA
Alarm Current	≤ 30 mA
Relay Capacity	2A@24VDC & 1A@250VAC
Protection Level	IP 30
Work Temperature	-10℃ ~50℃

Installation

- AW-D113 addressable monitor module must be installed as per the final drawings and wiring diagram.
- Set the address on the monitor module using programmer.
- Secure the module in the electrical box, supplied with the monitor module.

Wiring Connection
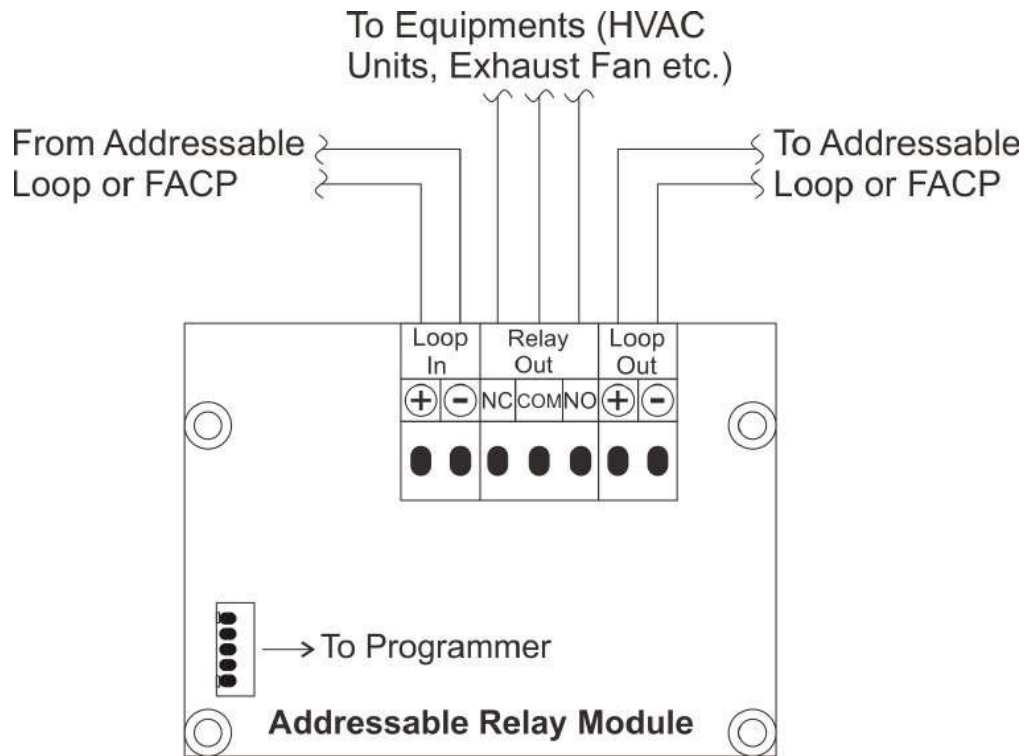
ISOLATOR MODULE

General

Asenware AW-D114 is an intelligent addressable isolator module, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID or individual address, which allows the panel to continuously monitor specific location (point). The module has two panel controlled LED indicator. AW-D114 isolator modules is used to protect the system against wire-to-wire
short circuits on the signaling line circuit.

Features

- Addressable-analog communication
- Two-wire connection
- Two LEDs one is Green, which blinks in normal condition and another one is Red which becomes steady during fire alarm condition.
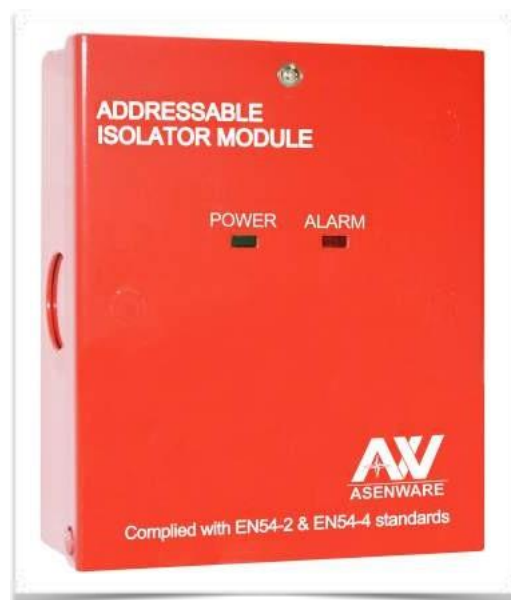- Remote test from Panel
- Automatically reset after correction of fault

Parameters

Operating Voltage	18V~28V DC
Standby Current	≤ 25 mA
Alarm Current	≤ 80 mA
Output Current	≤ 900 mA
Protection Level	IP 30
Work Temperature	-10℃ ~50℃

Installation

- AW-D114 addressable monitor module must be installed as per the final drawings and wiring diagram.
- Set the address on the monitor module using programmer.
- Secure the module in the electrical box, supplied with the monitor module.

Wiring Connection
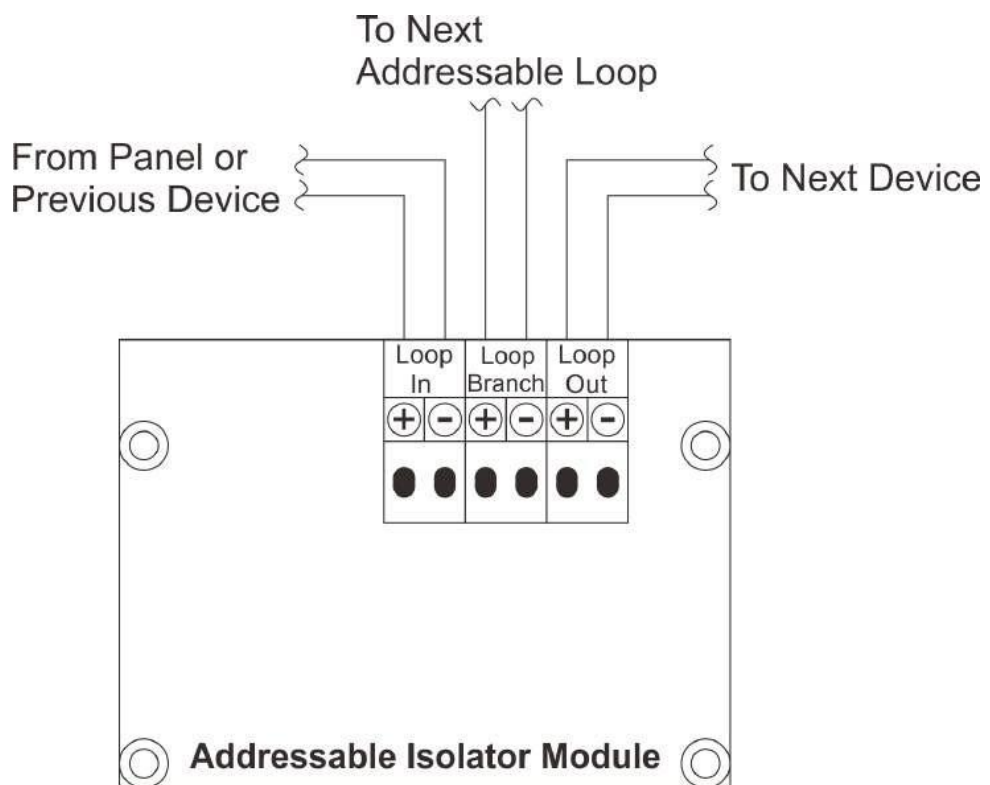
ANNUNCIATOR PANEL

General

Asenware AW-D116 is an addressable annunciator, which can be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. D116 is provided using an 80 character, back-lit, alphanumeric display. Information Messages includes for Alarm, Fault, Supervisory and General Conditions in a clear and descriptive English Language. Moreover, LEDs for Fire, Supervisory and Alarm are also provided with ACK push button. From the Silence push button, panel and Remote Notification appliances can be silenced.

Features

- Addressable-analog communication
- Two Lines of 40 Character each LCD
- LED Indication for Alarm, Fault and Supervisory
- Push Buttons to acknowledge and silence the alarm
- Lamp Test from Key Switch

Parameters

Operating Voltage	18V~28V DC
Work Current	≤ 30 mA
Temperature	-10℃~50℃
Protection Level	IP 30

Operation

AW-D116 can be used to deactivate the Notification appliances using SILENCE push button. All switches on the annunciator are controlled by the "ENABLE" key switch with a key that is removable only in the disabled position. A brief lamp/LCD test is performed whenever the key switch is changed from enabled to disabled. Using scroll push button, user may navigate the more than two incident which occurs simultaneously.
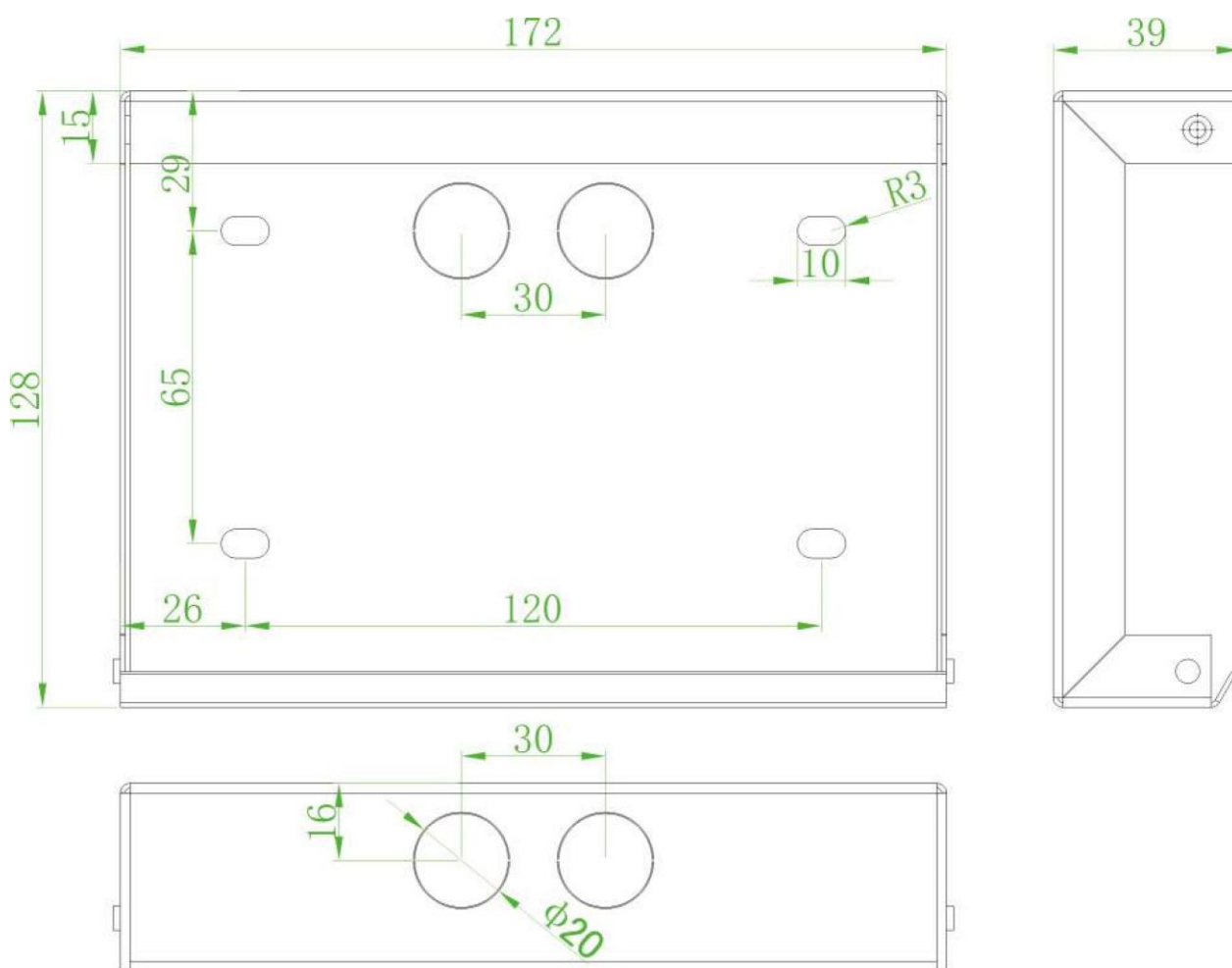
*All dimensions are in mm

PROGRAMMER

General

Asenware AW-PR101 is a programmer, which is used to assign addresses to all devices which need to be configured with Asenware AW-FP100 Series Addressable Fire Alarm Control Panel. Each point (devices) can be given specific ID using AW-PR101.

Features

- Assign Addressable-analog communication between device and panel
- Dual power operation

Parameters

Operating Voltage	4.5V~7 V DC
Rated Current	≤ 100 mA
Battery	AAA * 4
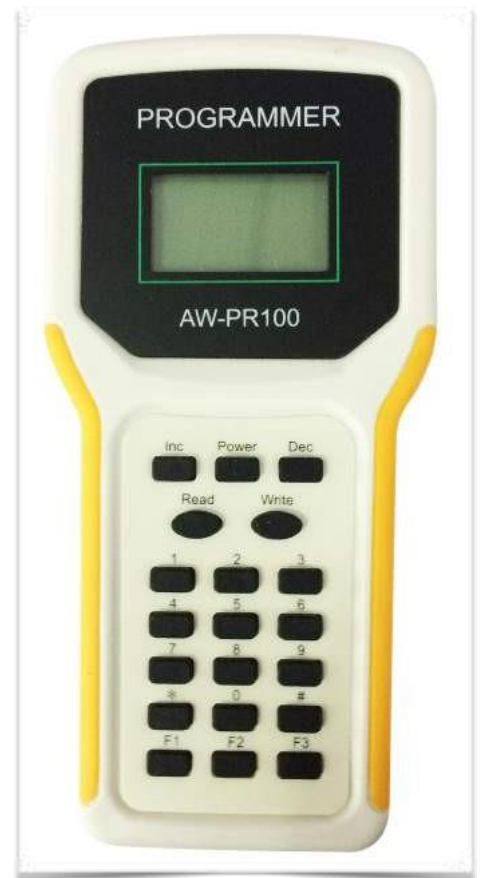
APPENDIX C
ASSIGNING ADDRESSES

Assigning the addresses to Devices

Programmer is needed to assign the address to each device i.e. detectors, modules, bells etc. Programmer is supplied with connectors to ease with addressing the devices. There are two different ways to assign addresses to detectors and rest of the devices.

Detectors Address Assignment

Detectors can be assigned specific addresses by connecting the connector and base (supplied with Programmer) with the detector and assign the number using the number keys on the programmer and then pushing WRITE button on it. Refer the below picture

Press 'WRITE' after assigning the address
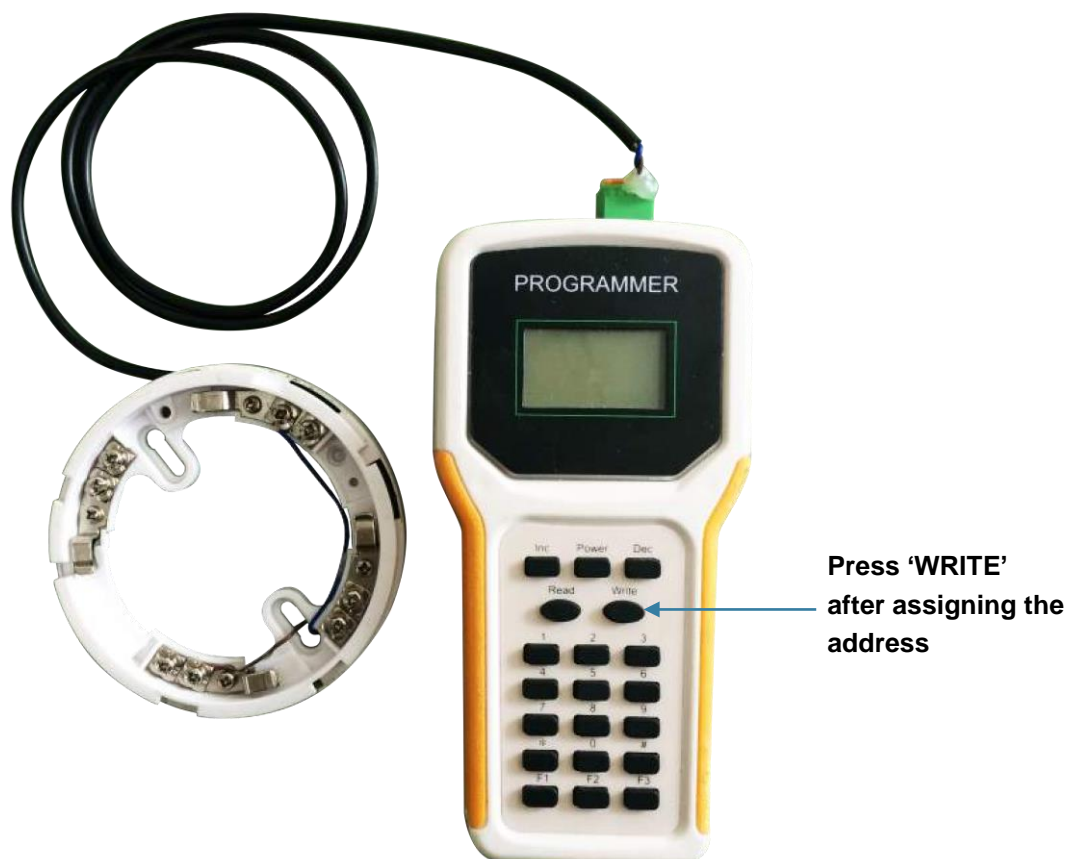
Other Devices Addresses Assignment

Devices other than detector can be addresses using the connector (supplied with Programmer). Connect the other side of device to the 'Program' (scribed in the circuit board) into the device and assign the number using the number keys on the programmer and then pushing WRITE button on it. Refer the below picture

Press 'WRITE' after assigning the address

ADDRESSABLE FIRE ALARM CONTROL PANEL

ADDRESSABLE FIRE ALARM CONTROL PANEL

L+
L-

L+
L-

L+
L-

L+
L-

L+
L-

L+
L-

For each 30 devices

Addressable
Fire Alarm Control Panel

Addressable
Fire Alarm Control Panel

Ethernet

CRT

Addressable Annunciator

Addressable
Monitor Module

→ Devices

Addressable
Supervisory Module

→ To Supervisory Equipments
(Flow Switch etc.)

Addressable
Control Module

→ To Notification Devices
(Bell, Strobe)

Addressable
Relay Module

→ To Equipments (HVAC
Units, Exhaust Fan etc.)

Addressable
Isolator Module

→ To Next
Addressable Loop

Maximum 250 devices can be configured in one Loop

Addressable
Smoke Detector

Addressable Bell

Addressable
Smoke Detector

Addressable
Heat Detector

Addressable
Combination Detector
(Heat & Smoke)

Addressable
Manual Call Point

Addressable
Strobe Sounder

Addressable Bell