TX7008R

Intelligent Addressable Fire Alarm Control Panel
Installation and Operation Manual

TECHNOLOGY

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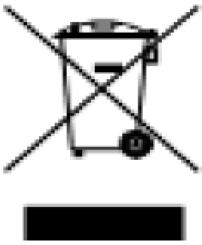
Product Safety

To prevent severe injury and loss of life or property, read the instruction carefully before installing the Control Panel to ensure proper and safe operation of the system.



European Union directive
2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

For more information please visit the website at www.recyclethis.info

Disclaimer

The information in this manual is furnished for informational use only and subject to the change without notice. While every effort has been made to ensure that the information contained in this user manual is accurate, reliable and up to date. The TANDA Technology cannot be held responsible for inaccuracies or error that may appear in this manual.

Document Improvement

EN54 Part 2&4 Compliance

TX7008R Intelligent Fire Alarm Control Panel complies with the requirements of EN54-2:1997 + A1:2002 &EN54-4:1997 + A1:2002 + A2:2006

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1 Introduction

1.1 Overview

The TX7008R comprise of a range of analogue addressable, microprocessor based fire alarm control equipment to offer flexibility in both design and operation. The System is modular concept for easy tailoring of system design, to meet the full requirements of the project. The TX7008R Intelligent Fire Alarm Control Panel is designed and manufactured to meet the requirement of BS EN54 Part 2&4.

The TX7008R is designed to provide early warning fire detection, to quickly identify the location of fire and provide user definable text informing the occupants of the building of potential smoke spread. Simultaneously, the TX7008R will alert and evacuate the occupants, and control all necessary auxiliary command functions such as elevator control, air handling shut down, gas shut off & damper control, as per the cause and effects requirements configured though Command Builder Set-up.

The TX7008R modular construction panel, capable of supervising eight [8] monitored detection loops. Each loop is capable to accommodate of 254 addressable devices of any combination with T&A protocols, namely intelligent sounder strobe TX7300 & intelligent sounder TX7320 complying with EN 54-3, rate of rise and fixed temperature heat detector TX7110 complying with EN 54-5, photoelectric smoke detector TX7100 complying with EN 54-7, intelligent manual call point TX7140 complying with EN 54-11, intelligent reflective beam detector (TX7130) complying with EN 54-12, input and output module TX7200, TX7210, TX7220 complying with EN54-18, and loop isolator TX7230 complying with EN 54-17. The T&A devices are fully loop powered to support saving cost of the cable.

These systems incorporate a number of features to allow easy operation through a user-friendly menu. The TX7008R has a LCD touch screen and Keypad menus for alternative operation with large button access to operate the keypad control by fire brigade personnel providing total user-friendly interface for browsing and programming. Added the commission features such as colour coded loop mapping, dual address and device mismatch monitoring, one-man test, simplified command builder's configuration that has proved to be highly rated by both commissioning and service engineers.

The Control Panel has multiple built-in features. The loop card has built-in surge protection and the communication card interface support multiple interface protocol such as USB, CAN Bus, Serial, RS485, Fiber Optic in one singe card. The panel is Built-In Printer and 160 LED Zones Indicators. The panel provides variety of inputs and outputs interfaces and auxiliary such as Output to Sounder, F.P.E., Alarm and Fault output, Relays and Power Auxiliary.

1.2 Feature and Benefits

- Compliance EN54-2 & N54-4
- Using advance microprocessor technology with Large memory capacity
- Enhance user interface combining LCD Touch screen and keypad access
- Support real time visual algorithm
- Enhance false alarm prevention
- Keypad and PC programming
- Support Multiple interface protocol such as USB /Can Bus
- Support Loop Powered devices for extra saving on cable cost
- Built-In Printer and 160 LED Zones Indicators

Commissioning Advantage

- Auto Enrolling of Devices
- Loop Mapping with colour coding status
- Monitor device mismatch and dual address conflict
- Command Builder to create requirements for fire event scenario
- With Loop protection against power surge

- One-man test with On/Off sounder
- Programming Protection

System Capacity

- Up to 8 loop
- Support 254 Devices/One loop (2,032 ideal)
- Network up to 512 Node
- Programmable Capacity
- Zones up to 3000
- Sounders Groups 1-1000
- Other Groups 1001- 3000
- Built-in 160 LED Zones Indicator

1.3 General Image

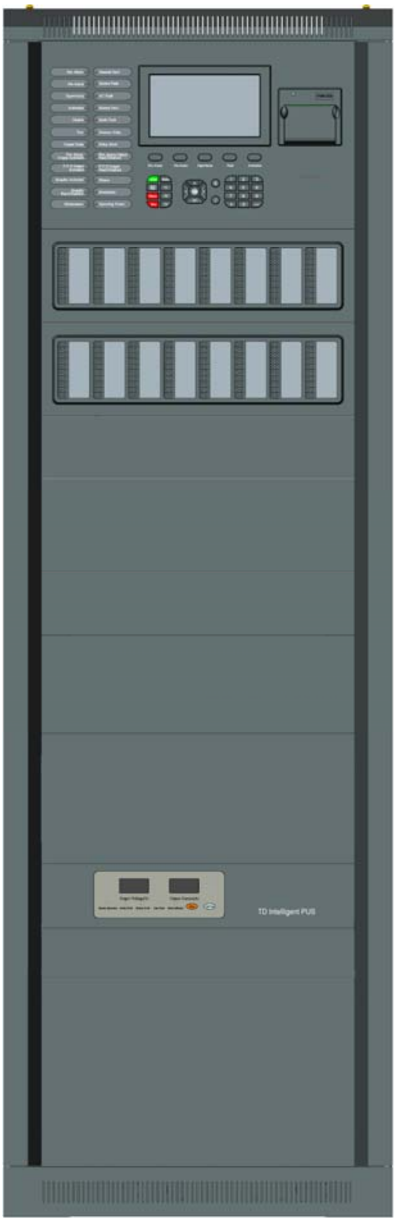


Figure 1

1.4 Technical Specification

• Compliance	EN54-2 & 4
• Input Voltage	230VAC +10%-15%, 50Hz (120VAC, 60Hz, it is not applicable for EN54 & Not tested by LPCB)
• Input Current Consumption	1.3A
• PSU Output To CIE	21.5~28.5VDC
• Batteries	Maximum Charge Capacity: 2 x 12V / 45AH Maximum Charge Current: 1.7A I maxA: 1.41A I maxB: 3.01A Minimum Quiescent Current: 0.45A(Imin) Maximum Internal Resistance: 1.0Ω Rechargeable-Lead acid type battery
• Recommended manufacturer and model of battery:	PG-12V42 FR 12V45AH (Tested With CIE By LPCB)
• Networking and Interfaces	
Panel to panel communication	Can Bus [loop]
Number of Panels	512
Interface Port	USB
• System Capacity	
Memory [Non-Volatile]	1000 Fire Events, 10,000 General Event
Zones	3,000 programmable
Total Group	3,000 programmable
Sounder Group	1,000 programmable
Common Group	2,000 programmable
• Loop Specifications	
Protocol/Addressing	T&A, Value range from 1 to 254
No. of Loop	8 Loop
Protection	Built-in 4kV Surge protection
Power rating	16~24Vdc /120mA
Cabling	1.0Km Max Length/2 x 1.5mm^2 solid core Fire resistance
• Recommended Wiring	(subject to local installation codes)
ISST-SFR3/ 711c-(cl-5)	Intelligent Safety & Security Technology Limited
NoBurn XPS/ 682e/01	Ventcroft Limited
FT30 SAFFIRE/ 1134j	Draka UK Limited
Context Plus/682a-(cl-3)	Context Plus Ltd
FP200 Gold LSOH/ 077k/01	Prysmian Cables & Systems Limited And all LPCB approved Fire cables Recommended Cable Length ≤1000m
• Panel Input/outputs	
Programmable Relays	4 circuits: Normally Open/Close
Programmable Input	1 Circuit: Current Limited 24Vdc (for future use)
Programmable Auxiliary Power	19~28Vdc (Current Limited)
Fixed Outputs (FPE/Sounder)	2 Circuits: 18~28Vdc (Current Limited)
• Indicator	24 LED Status/ 160 Zone Indicators
• Display	7" TFT Touch Screen
• Keypad	5 Brigade buttons and Programming Keypad
• Material / Color	Flat sheet Metal /Black
• Dimension Lx W x H	1715 mm x 550 mm x 480mm
• Temperature	-5℃~+40℃
• Humidity	0 to 95% Relative Humidity, Non condensing

2 Installation

This Fire Alarm Control Panel must be installed, commissioned and maintained by a qualified or factory trained service personnel. The installation must be installed in compliance with all local codes having a jurisdiction in your area or BS 5839 Part 1 and EN54.

NOTE: *Read this manual fully and review drawing before starting the installations.*

Warning: *The electronic components inside the panel are vulnerable to damage by electrostatic discharges. It is recommended to wear a wrist strap designed to prevent the build-up of static charges within the body, before handling any electronic circuit board.*

The manufacturer takes no responsibility for damage or injury occasioned as a result of failing to install or operate or maintain the control panel in accordance with these manual and other good practices.

2.1 Names and Location

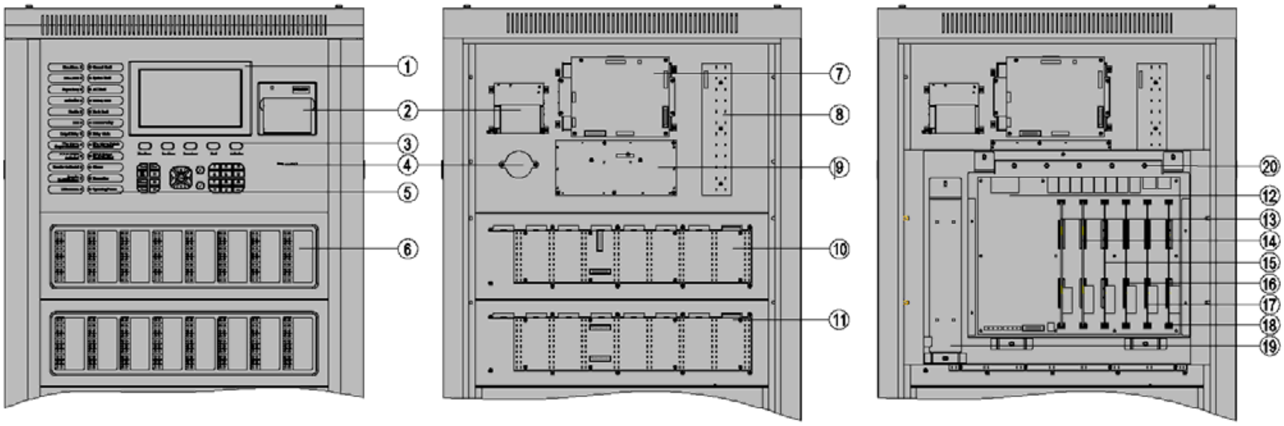


Figure 2

1) LCD Touch Screen
2) Printer
3) Operational Keypad
4) Buzzer
5) Status LED Indicator
6) Zone LED Indicator
7) Main Board
8) LED Circuit Board
9) Keypad Circuit Board
10) First Zone LED Board
11) Second Zone LED Board
12) Power Management Board
13) Loop 1 & 2 Board
14) Loop 3 & 4 Board
15) Loop 5 & 6 Board
16) Loop 7 & 8 Board
17) Communication Board 1
18) Communication Board 2
19) Power Supply Unit
20) Power terminal Board
21) Battery Space
22) Earth stud

A standard FACP consists of main board, loop board, Power management board, indication board, and zone indication panel.

Main board
Main board is the core of the FACP, which contains CPU and interfaces to other main and optional components of the system.

Loop board
As the signal interface of the FACP, the loop board contains ports for detection output that connects field devices and the FACP into a complete fire alarm system.

Power management board
It provides power to the main board, loop board and printer. Its backup feature ensures that devices registered during commission will not be lost in case of power fault. It also connects with power management Board, Main board, loop boards, network board and communication board.

Display and operation part
This part consists of switch board, keypad board, and LCD. It is used to indicate and display different status of the system, and enables operations through keypad (browsing, setting, printing and etc).

Zone indication panel
The zone indication panel can indicate zone wise status and point status of the particular device.

2.2 Terminals and Connection

Notes:

1. Practice the General Guideline on laying cables and termination.
2. Lay the cable properly, do not stretch the cable tight inside the cabinet allow some looseness. Loop cable shall not mix with power cables allow some gap. Jointing of cables should be avoided as far as possible.
3. Ensure all electrical connection is tested before connection and observe the polarity of the battery cables.
4. All the loop, input/output circuit cable, sounder cables must be provided with identification mark or identifiers indicating the loop number in accordance with the cable loop circuit.
5. Make sure all the cables are arranged and marked properly for troubleshooting and maintenance.
6. Through the earth stud bonding enclosure and earth.

2.2.1 Power Supply

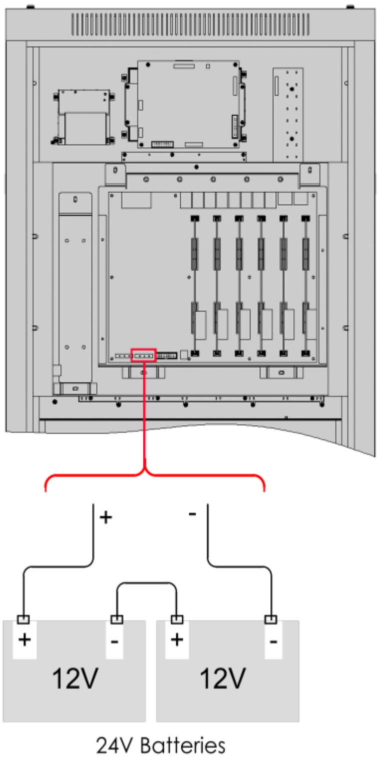


Figure 3: Power Wiring Details

Main Power Supply
Input: 230VAC +10%-15%, 50Hz
Cable Type: 1.5mm^2 Standard fire resistance cable
Location: P1 power terminal board

Secondary Power Supply
Size: 2 x 12V / 45AH
Type: Rechargeable-Lead acid battery
Cable type: Supplied
Location: P2 Power Management Board

Notes: Only Input Voltage range 230VAC +10%-15%, 50Hz applied LPCB certification, 120VAC, 60Hz, it is not applicable for EN54 & Not tested by LPCB.

2.2.2 Input/output

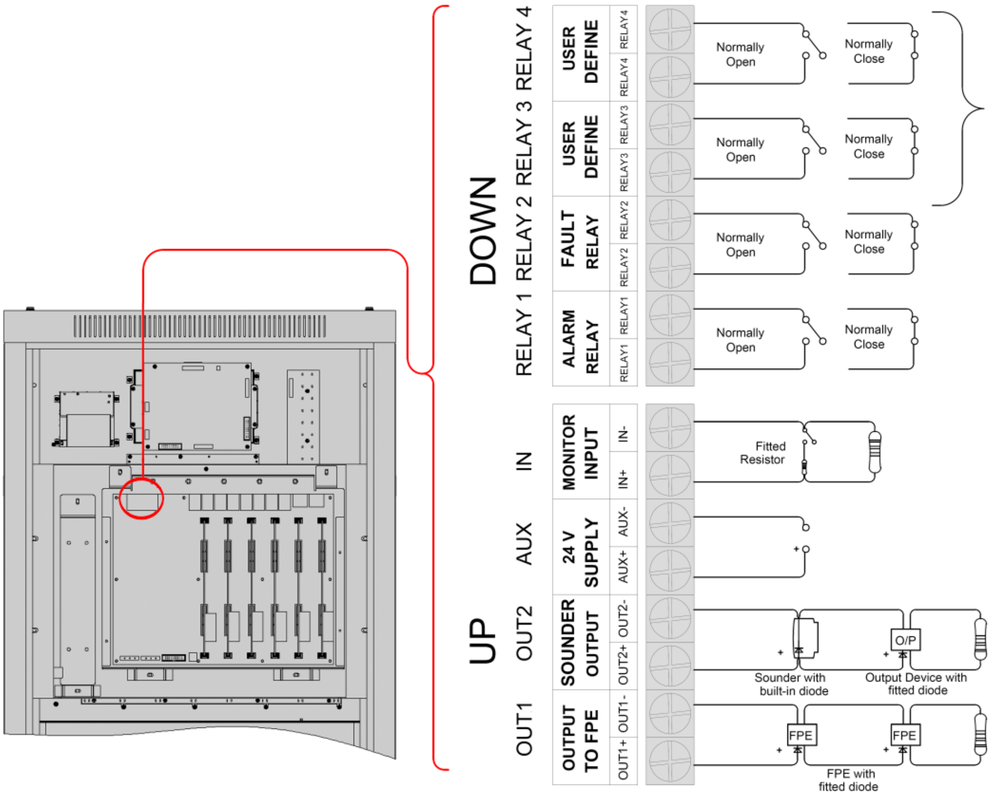

DOWN
UP
RELAY 1
RELAY 2
RELAY 3
RELAY 4
IN
AUX
OUT2
OUT1
ALARM RELAY
FAULT RELAY
USER DEFINE
USER DEFINE
MONITOR INPUT
24 V SUPPLY
SOUNDER OUTPUT
OUTPUT TO FPE
RELAY1
RELAY1
RELAY2
RELAY2
RELAY3
RELAY3
RELAY4
RELAY4
IN-
IN+
AUX-
AUX+
OUT2-
OUT2+
OUT1-
OUT1+
Normally Open
Normally Close
Fitted Resistor
Sounder with built-in diode
O/P
Output Device with fitted diode
FPE
FPE with fitted diode

Figure 4: Input/output Wiring Details

Input/output Functionality

Terminal	Description	Monitoring	When off	When on
OUT1	Output to F.P.E	Monitored [4.7KΩ EOLR]	-0.5 to +1.3VDC	+24VDC
OUT2	Output to Sounder	Monitored [4.7KΩ EOLR]	-0.5 to +1.3VDC	+24VDC
AUX	Power Supply	Monitored	Set to 3: 24VDC Continuous Set to 4: 0V for 15 seconds- Resettable	-
IN	Remote access (for future use)	Unmonitored	-	-
RELAY1	Alarm Relay	Unmonitored	Normally Open/Close	Change-over
RELAY2	Fault Relay	Unmonitored	Panel On-Normally Open/Close	Change-over
			Panel Off- Normally Open/Close [EN54-2]	-
RELAY3	User Define	Unmonitored	Normally Open/Close	Change-over
RELAY4	User Define	Unmonitored	Normally Open/Close	Change-over

NOTE: *Change the RELAY normally Open/Close setting by the Jumpers on the Power Management Board.*

2.2.3 Loop and Network

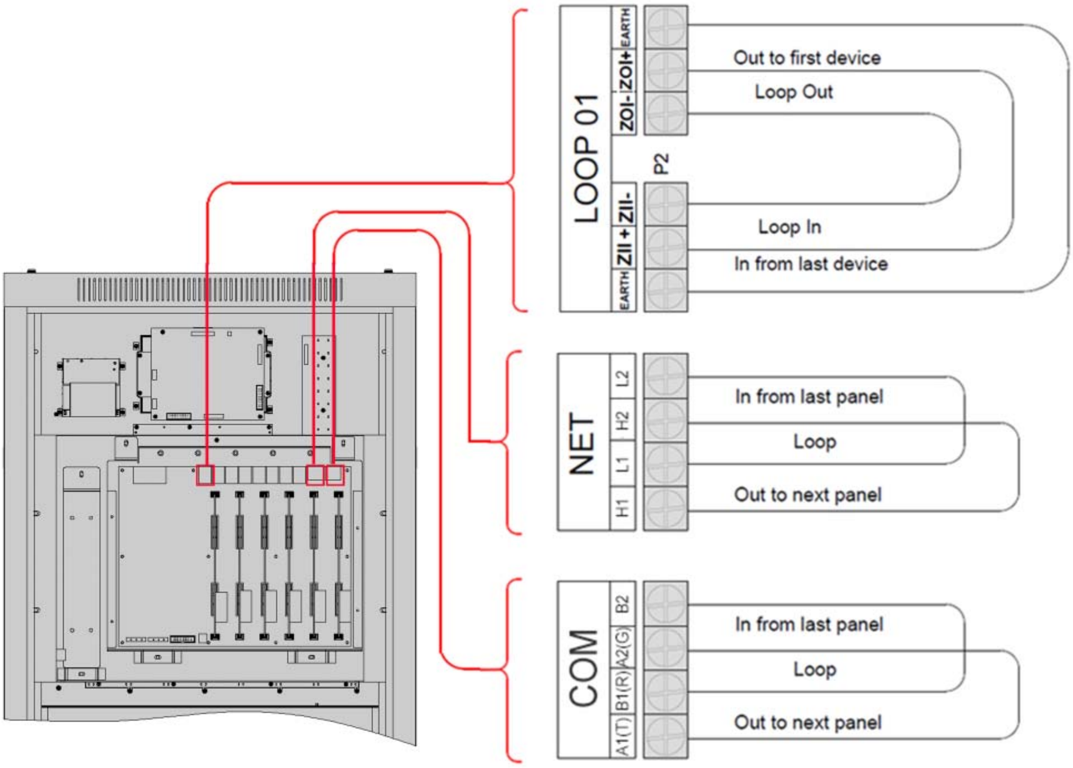

LOOP 01
EARTH
ZOI+
ZOI-
P2
ZII-
ZII+
EARTH
Out to first device
Loop Out
Loop In
In from last device
NET
L2
H2
L1
H1
In from last panel
Loop
Out to next panel
COM
B2
A2(G)
B1(R)
A1(T)
In from last panel
Loop
Out to next panel

Figure 5: Loop and Network Wiring Details

LOOP1 to LOOP8: Each loop can have maximum 254 addressable devices. The FACP can have maximum 8 loops. If loop isolators are connected into the Class A loop, the detectors protected by the isolators will not be lost in case of short or open circuit with the loop, and the FACP reports loop fault.

Net (CAN BUS SIGNAL):

CAN BUS: Communication cable for connecting with up to 99 network FACP. H2(CANH2), L2(CANL2)of the previous FACP are to be connected with H1(CANH1) and L1(CANL1) of the next FACP, and H2(CANH2), L2(CANL2) of the next FACP are to be connected with H1 (CANH1) and L1 (CANL1) of the previous FACP.)

Com(RS485 SIGNAL): (For future use)

Connection used for hardware interface for attaching laptop in configuring the control panel. The A1/A2(485A) and B1/B2(485B) is connected with PC through two-core screened cable **(Note: the length of cable should be less than 1000m; the screening layer should be earthed).**

3 Control Panel Descriptions

3.1 Control Panel Fascia

Before operating the system read first this chapter and is familiar with the panel user interface.

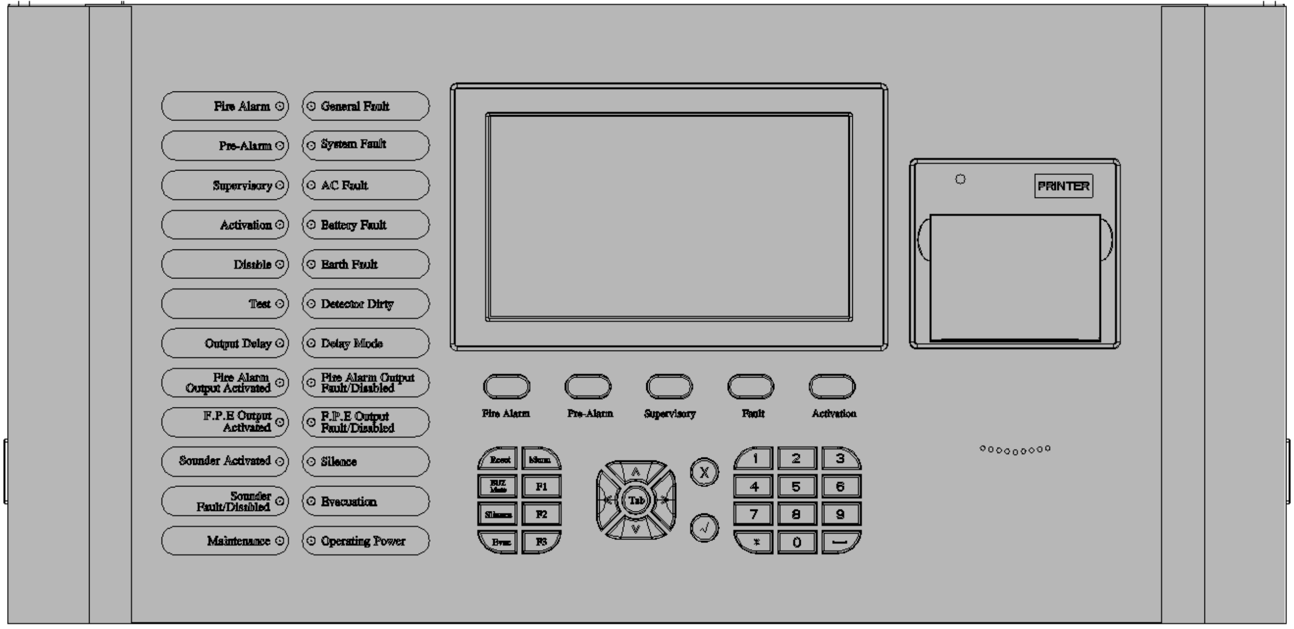

Fire Alarm
Pre-Alarm
Supervisory
Activation
Disable
Test
Output Delay
Fire Alarm Output Activated
F.P.E Output Activated
Sounder Activated
Sounder Fault/Disabled
Maintenance
General Fault
System Fault
AC Fault
Battery Fault
Earth Fault
Detector Dirty
Delay Mode
Fire Alarm Output Fault/Disabled
F.P.E Output Fault/Disabled
Silence
Evacuation
Operating Power
PRINTER
Fire Alarm
Pre-Alarm
Supervisory
Fault
Activation
Reset
Menu
BUZ Mute
F1
Silence
F2
Evac
F3
Tab
X
1
2
3
4
5
6
7
8
9
0

Figure 6

3.1.1 LED Indicator

Indicators	Colour	Description	How to clear
Display:		This provides the message of the events and system status.	
Fire Alarm	RED	When illuminated it indicates that a FIRE has been detected in the protected location	Attend the condition and perform the panel reset
General Fault	YELLOW	When illuminated it indicates that a FAULT has been detected in the devices and alarm system.	Correct the condition that cause fault and automatically clear the indication or perform a panel reset
Pre-Alarm	RED	When illuminated it indicates that a PRE-ALARM has been detected in the specified zone(s)	Attend the condition and press the ACK button to turn the system to Pre-alarm verification.
System Fault	YELLOW	When illuminated it indicates that the fault has occurred with the main processor. It is suggested to investigate the fault due to the panel will not able to attend the fires.	Turn –off and on the panel
Supervisory	RED	It illuminates when the panel receives Supervisory information. The devices whose types are between 31 and 55 can carry out supervisory information, which is similar to fire detector. Normally it is carried out from Input Modules.	Attend the condition and perform a panel reset

Activation	RED	It illuminates when the panel receives Activation information. The devices whose types are between 62 and 75(Common Group Devices) can carry out activation information. Normally it is carried out from Output Modules. (**Note**: Not include Sounder Group devices, the panel will not display Sounder Group Devices' activation information)	Attend the condition and perform the panel reset
Disable	YELLOW	When illuminated it indicates that part of the panel has been disabled	Enable the device/s and automatically clear the indication
Test	YELLOW	When illuminated it indicates one or more zones are in test mode.	Cancel test when finished
AC Fault	YELLOW	When illuminated it indicates that the main power has been failed	Test the AC power source or check the connections.
Battery Fault	YELLOW	Yellow. When illuminated it indicates that the battery has been failed.	Replace the battery or check the connections.
Earth Fault	YELLOW	When illuminated it indicates that the panel or loop wiring is grounded	Clear the ground fault
Detector Dirty	YELLOW	When illuminated it indicate that a dirty chamber has been detected in the specified smoke detector.	Clean the smoke chamber and perform the panel reset
Output Delay	YELLOW	When illuminated it indicates that part of the system output is block by delayed.	Wait until the time delay is laps. Or Override by pressing F1 function key. Or cancel by pressing F2 function key
Delay Mode	YELLOW	When illuminated it indicates that the system is set to Day mode that allows the system to follow the schedule delay time.	Disable the delay mode or Disable Delay mode Led indicator
Fire Alarm Output Activated	RED	It illuminates when the panel's OUT1 Circuit (Output to Sounder) is activated.	Perform the panel reset
FPE Output Activated	RED	It illuminates when the panel's OUT2 Circuit (Output to FPE) is activated.	Perform the panel reset
Fire Alarm Fault /Disable	YELLOW	When illuminated it indicates that the Output to Sounder circuit has been disabled or fault is occurred	Enable the device/s and attend the condition
FPE Fault /Disable	YELLOW	When illuminated it indicates that the Output to FPE circuit has been disabled or fault is occurred	Enable the device/s and attend the condition
Sounder Actived	RED	It illuminates when the loop sounder is activated.	Perform the panel reset
Sounder Fault /Disable	YELLOW	When illuminated it indicates that a fault or disable in the loop sounders.	Cancel after corrected the condition that cause sounder fault.

SILENCE	YELLOW	When illuminated it indicates that the SILENCE button has been pressed and the panel is silenced.	Correct the alarm condition then perform the panel rest. Note: If there a new alarm occurs, the panel will resound again.
Evacuation	RED	When illuminated it indicates that the EVAC button has been pressed	
Maintenance	YELLOW	When illuminated it indicates that the panel is in programming mode.	Exit the programming menu, and automatically clear the indication
Operating Power	GREEN	When illuminated it indicates the power supply is present	N/A

3.1.2 Display and Control Keypads Function

LCD SCREEN: Touch screen display, use for optional user interface aside from operational keypads which shows options that can be choose by touching the screen.

View Information: This is single-button activation. This allows easy single activation of viewing the most important information such as Fire Alarm, Pre-Alarm, Supervisory, Faults and Active.

Fire Alarm Info: When fire alarm occurs, the buzzer of the FACP sounds. Please first find out the location according to the information Shown on the FACP to verify whether the fire really happened. If it's a real fire, please take corresponding measures as outlined below.
Step 1: Press EVAC or F1 and F2 to evacuate the people in field.
Step 2: Call the fire department.
Step 3: Initiate extinguishers.
If it is a false alarm, please take the following measures
Step 1: Press SILENCE to stop the sound.
Step 2: Remove the causes of the false alarm.
Step 3: Press RESET to make the FACP back to the normal state. If the device still gives false alarm, disable it and inform the installer or manufacturer for repair.

Pre-Alarm Info: In case of a pre-alarm, the Pre-Alarm LED will illuminate, and the buzzer of the FACP will sound continuously. The FACP provides two types of dependency on more than one alarm signal in zone setup. If a zone is set as Type A dependency, the alarm of a detector from this zone will be reported as a pre-alarm, and only when there is another detector from the same zone alarms, will the FACP report a fire alarm. If a zone is set as Type B dependency, the alarm of a detector from this zone will be reported as a pre-alarm, and when there is another detector alarm from any zone, the FACP will report a fire alarm. In different working mode, the disposal of the pre-alarm signal will be different.

In night mode, if a zone is set as Type A dependency, the pre-alarm will be delayed for 30 minutes. If it's set as Type B dependency, the pre-alarm will be delayed for 5 minutes.

In day mode, if a pre-alarm comes, the screen will display the delay time Stage 1 for acknowledgement of the pre-alarm. Pressing ACK, the FACP will enter the delay time Stage 2 for verifying if it's a true fire alarm.

Supervisory Info: The display screen is the same as fire alarm.

Fault Info: The indication of the fault message depends on the type of fault. Specific fault types and causes are shown in Appendix 2.

AC fault: If the AC supply is down, the panel will report AC fault
Light AC FAULT LED.
The LCD displays "AC FAULT"
The panel generates fault sound.
Fault relay outputs.

Battery fault: The panel will reports battery fault if the battery voltage is lower than 21VDC or the internal resistance is higher than 1 ohm

Light GENERAL FAULT and BATTERY FAULT LED.

The LCD displays "BATTERY FAULT" or "BAT Resistance FAULT".

The panel generates fault sound.

Fault relay outputs.

System fault: The panel will report system fault if its control CPU and circuit is in fault and the panel cannot work normally. The panel will enter Safe state.

It lights the SYSTEM FAULT LED.
There is no display on the LCD.
The panel generates continuous alarm sound.
The keypad cannot be used.
After the fault is removed, the FACP has to be reset by rebooting.
Fault relay outputs.

Earth fault: When Loop Bus is connected to the earth, the FACP reports earth fault.

It lights the GENERAL FAULT and EARTH FAULT LED.
The FACP generates fault sound.
Fault relay outputs.

NOTE:

The Safe state: When the crystal oscillator occurs short circuit, the system enters into safe mode, which is the fault state of system.

If the crystal oscillator of Mainboard /loop Board occurs short circuit, the controller will report system fault. **RELAY2** Change-over, **OUT1/ OUT2/ AUX/ RELAY1 /RELAY3/ RELAY4** keep state.

If the Power Board enters into safe mode, the controller will report system fault. **RELAY2** Change-over, **RELAY1 /RELAY3/ RELAY4** keep state, **OUT1/ OUT2/ AUX** will be off.

If the crystal oscillator of Communication board/Zone Indication panel occurs short circuit, it will report communication fault.

Activation Info: When the device is activated manually or by linkage.

MENU: This buttons is used to access to the system menu. Each option in the menu corresponds to one number button. This is accessible under the manager password.

F1, F2, F3: This button is Functional keys. This allows easy single-button activation of the common used features.

RESET: This button allows resetting the control panel. Pressing the reset button perform a cold reboot allow to clear all current events then restore the panel to the normal condition.

BUZ MUTE: This button mutes the buzzer of the control panel. Pressing the mute button will stop the internal panel buzzer.

SILENCE: This button silences the alarm warning circuit and devices. Pressing the silence button will stop panel sounder output and the entire sounder devices in the loop which programmed as device type 56, 57, 58, 59, 60, 61.

EVAC: This button enables the alarm warning circuit and devices. Pressing the EVAC button will start panel sounder output and the entire sounder devices in the loop which programmed as device type 56, 57, 58, 59, 60, 61.

Numerical and Alphabetic Keys (1, 2ABC, 3DEF, 4GHI, 5JKL, 6MNO, 7PQRS, 8TUV, 9WXYZ, 0, ␣, *): This button is used to enter the data manually at the control panel.

<>TAB^v: This button is for the position indicator on the display screen where a user can enter inputs.

X: This is a cancel button. Pressing the [X] button will cancel the operation and return to the main menu, and allow user to exit programming without saving.

√: This is an enter button. Pressing the [√] button will confirm saving settings and validate various option and messages.

3.1.3 Zone LED Indicator

Each FACP has a built-in two zone indication panels, appearance of which is shown in Figure 11.

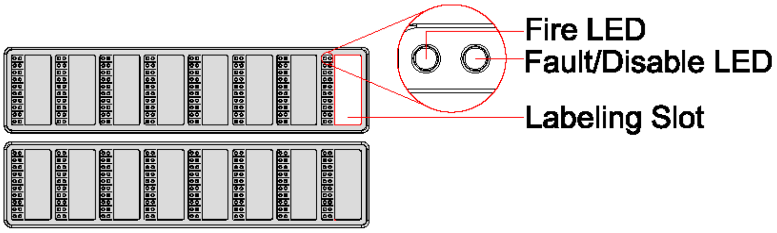


Figure 7: LED Indication

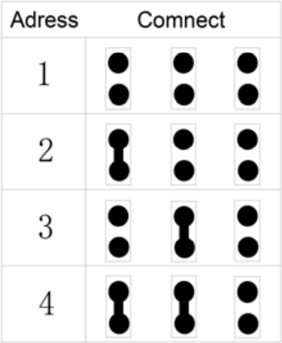
Display

The LED indicators support up to 80 displays. Each display can be identified according to the pre-configure setting on Zone Display Card LED Setup. The user can put the name of device on the right of the indicators.

Display Type	**Indication**					**Description**
	Fire	Fault	Disable	Test	Active	
Display Zone Status	RED Steady	Yellow Blinking	Yellow Steady	Yellow Steady	-	Zone indication
Display Group Status	-	Yellow Blinking	Yellow Steady	-	RED Steady	Group Indication
Display Loop Device Status	RED Steady	Yellow Blinking	Yellow Steady	-	RED" Steady	RED'= if device type is assigned to Fire signal RED"= if device type is assigned to Activation signal

LED indicator Board

The two LED board fits on the panel which can be extended up to 4 circuit boards. Each LED indicator position is identified through jumper setting as shown below:



The last column is free,
there is no change to the gate

Figure 8

3.2 Type for Sound Indication

The FACP will give sound of higher priority if two types of event occur simultaneously.
The FACP gives continuous sound when fire alarm or Pre alarm occurs.
The FACP gives slow sound (0.5s on, 0.5s off) when there is supervisory message.
The FACP gives slow sound (1s on, 1s off) when fault occurs.
The FACP gives slow sound (2s on, 2s off) when Activation occurs.

4 System Commissioning

4.1 Preparation

Before switching on the panel ensures all electrical connections are tested, measured and visually checked and all the devices should be wired correctly.

4.2 Keypad/Keyboard Locking

The keypad and keyboard [touch-screen] can be locked by the user if desire. To unlock this control panel has three user access levels: Note, each access level has its own operating criteria.

Level 1: user access without entering pass code [Default Setting]
Level 2: user access with entering special pass code known as operation pass code [Default Setting 11111111]
Level 3: user access with entering special pass code known as commissioning pass code [Default Setting 22222222]
Level 4: factory level pass code

4.3 Basic Commissioning Procedures

1. Make sure all the addressable devices are encoded with the unique number. The address of the device is recommended to be consecutive number but not limited in order to have flexibility and should not be repeated.
2. Connect the loop with the panel as follow: Loop Out (+) to Loop In (+) / Loop Out (-) to Loop In (-).
3. Turn on the panel. Select the desire option as follow:
    1. Log-in Directly
    2. Enroll Additional Device
    3. Enroll All
4. The control panel should be set to commissioning mode in order to have a full access to any programming menu of the system. **Note:** It is required that after the commissioning is completed or before leaving the panel on the job site, always keep the system under the Monitoring mode to protect and secure the last made configurations.
   Using touch-screen interface:
   On the Main Menu tap **Commission Menu**. Input the Pass code [level 3] then tap **Panel Setup** and then tap **Function State Setup** and shows state selection.

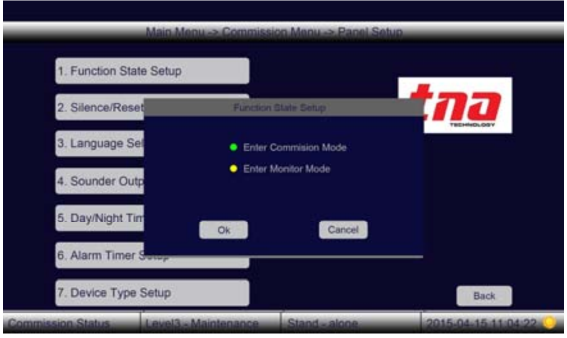

Main Menu -> Commission Menu -> Panel Setup
1. Function State Setup
2. Silence/Reset
3. Language Se
4. Sounder Outp
5. Day/Night Tim
6. Alarm Timer Setup
7. Device Type Setup
tna TECHNOLOGY
Function State Setup
● Enter Commision Mode
● Enter Monitor Mode
Ok
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 9

5. Set the passcode of the panel.
6. View the enrolled devices and compare to the project layout.
   Using touch-screen interface:

On the Main Menu tap **Navigating Menu** then tap **View Panel Status** and then tap **View Loop Board** and shows number of total enrolled devices.

Using key-pad interface:

On the Key **Menu** press Menu, then press button **1,** then press button **1**, then press button **2 View Loop Board.**

7. Download the pre-configured data base from TX7810 programming software through a computer to the control panel. Refer to the TX7810 Defining Tool manual for more details.
8. Test the system.

5 Operation and Commission Menu

5.1 Navigating Menu Hierarchy

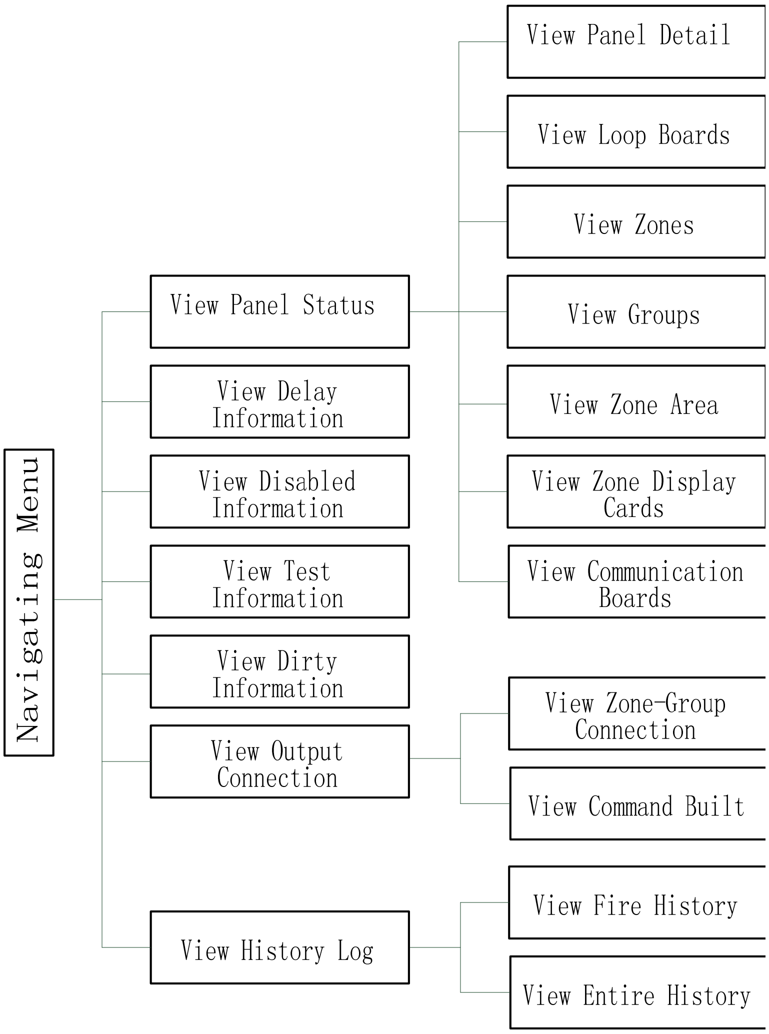

Navigating Menu
View Panel Status
View Delay Information
View Disabled Information
View Test Information
View Dirty Information
View Output Connection
View History Log
View Panel Detail
View Loop Boards
View Zones
View Groups
View Zone Area
View Zone Display Cards
View Communication Boards
View Zone-Group Connection
View Command Built
View Fire History
View Entire History

Figure 10

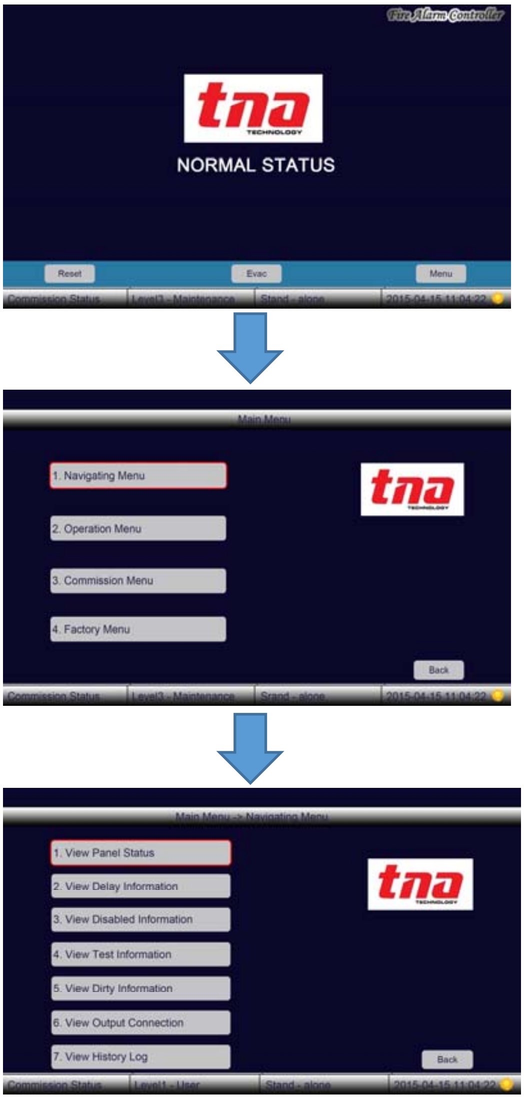

Fire Alarm Controller
tna TECHNOLOGY
NORMAL STATUS
Reset
Evac
Menu
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22
Main Menu
1. Navigating Menu
2. Operation Menu
3. Commission Menu
4. Factory Menu
Back
Main Menu -> Navigating Menu
1. View Panel Status
2. View Delay Information
3. View Disabled Information
4. View Test Information
5. View Dirty Information
6. View Output Connection
7. View History Log
Level1 - User

Figure 11

Navigation Menu

This menu provides to review alarm events history, the various system devices and their associated configurations. When a menu selection is made, the system displays the appropriate information. To access in this menu level 1 is required.

5.1.1 View Panel Status

This displays all the status and the latest information of your system. The detailed reporting status are divided into seven [7] sub-menus.

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then view the sub-menus

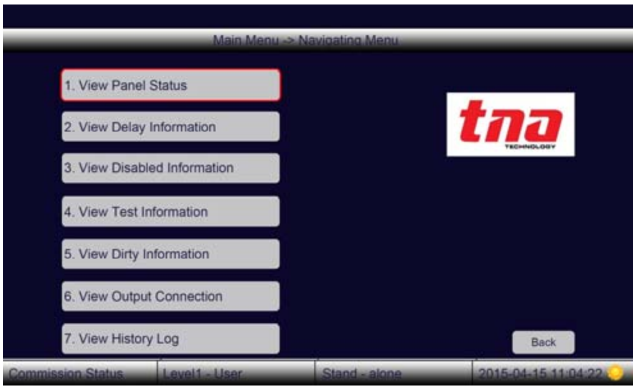
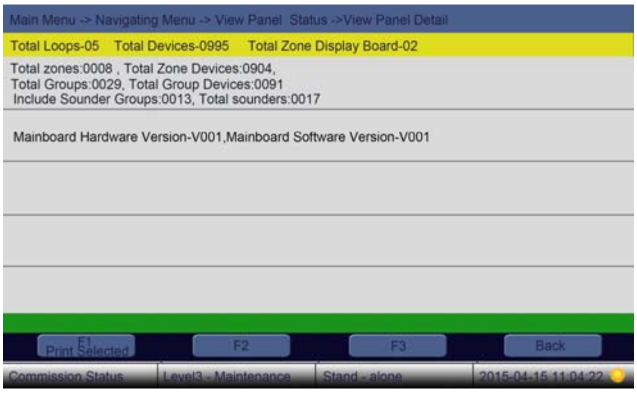

Main Menu -> Navigating Menu
1. View Panel Status
2. View Delay Information
3. View Disabled Information
4. View Test Information
5. View Dirty Information
6. View Output Connection
7. View History Log
Back
Commission Status
Level1 - User
Stand - alone
2015-04-15 11:04:22

Figure 12

5.1.1.1 View Panel Details

This display the total number of loops, devices, and display boards, zones, common and sounder groups monitored by the panel including panel main board software version

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **1 View Panel Details** and shows the details


Main Menu -> Navigating Menu -> View Panel Status ->View Panel Detail

Total Loops-05 Total Devices-0995 Total Zone Display Board-02

Total zones:0008 , Total Zone Devices:0904,
Total Groups:0029, Total Group Devices:0091
Include Sounder Groups:0013, Total sounders:0017

Mainboard Hardware Version-V001,Mainboard Software Version-V001

F1
Print Selected
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

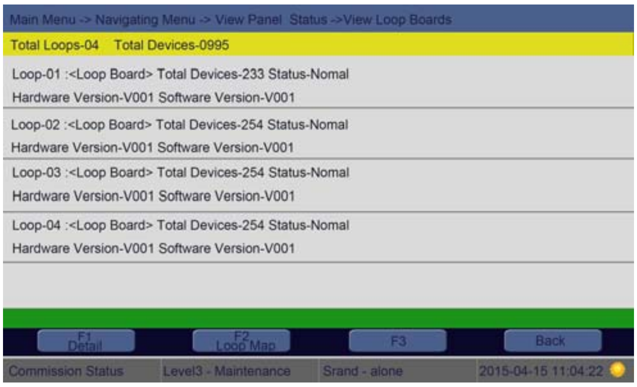
Figure 13

5.1.1.2 View Loop Boards

This display the number of devices enrolled in the loop and loop software versions

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **2 View Loop Board** and shows the detail

For more additional details about on the particular loop configuration tap **F1** tab for device list and **F2** tab for loop map.


Main Menu -> Navigating Menu -> View Panel Status ->View Loop Boards

Total Loops-04 Total Devices-0995

Loop-01 :<Loop Board> Total Devices-233 Status-Nomal
Hardware Version-V001 Software Version-V001

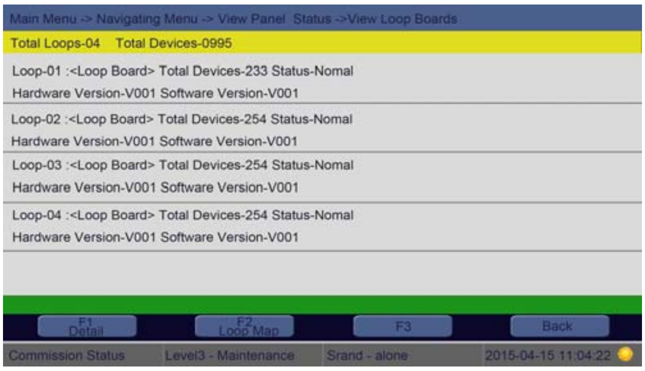
Loop-02 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

Loop-03 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

Loop-04 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

F1
Detail
F2
Loop Map
F3
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Figure 14


Main Menu -> Navigating Menu -> View Panel Status ->View Loop Boards
F1 Detail
F2 Loop Map
F3
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Total Loops-04   Total Devices-0995

Loop-01 :<Loop Board> Total Devices-233 Status-Nomal
Hardware Version-V001 Software Version-V001

Loop-02 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

Loop-03 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

Loop-04 :<Loop Board> Total Devices-254 Status-Nomal
Hardware Version-V001 Software Version-V001

Figure 15: Loop details (F1)

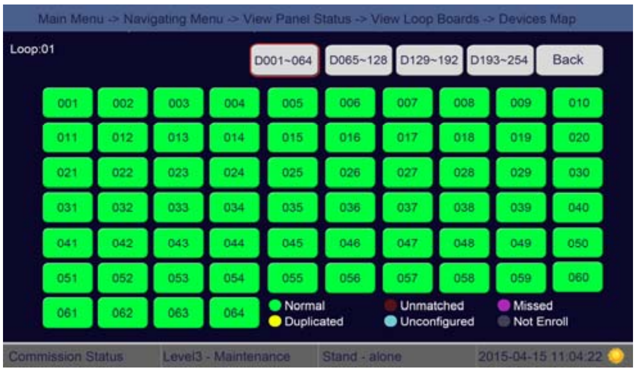

Main Menu -> Navigating Menu -> View Panel Status -> View Loop Boards -> Devices Map
Loop:01
D001~064
D065~128
D129~192
D193~254
Back
001 002 003 004 005 006 007 008 009 010
011 012 013 014 015 016 017 018 019 020
021 022 023 024 025 026 027 028 029 030
031 032 033 034 035 036 037 038 039 040
041 042 043 044 045 046 047 048 049 050
051 052 053 054 055 056 057 058 059 060
061 062 063 064
Normal
Duplicated
Unmatched
Unconfigured
Missed
Not Enroll
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

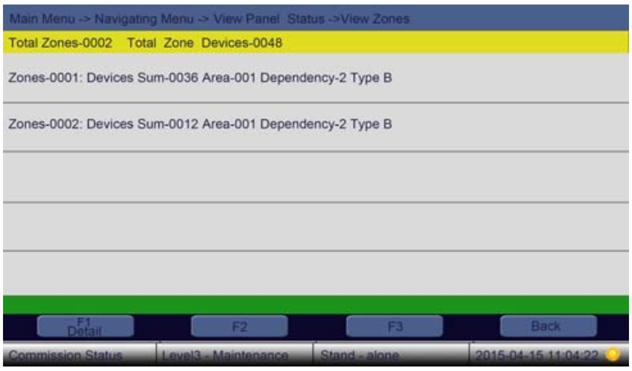
Figure 16: Loop Map (F2)

5.1.1.3 View Zones

This display the total numbers of zones configured and the assigned devices on that particular zone.

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **3 View Zones** and shows the details

For additional details about on the particular zone configuration tap F1 tab.


Main Menu -> Navigating Menu -> View Panel Status ->View Zones
F1 Detail
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total Zones-0002   Total Zone Devices-0048

Zones-0001: Devices Sum-0036 Area-001 Dependency-2 Type B

Zones-0002: Devices Sum-0012 Area-001 Dependency-2 Type B

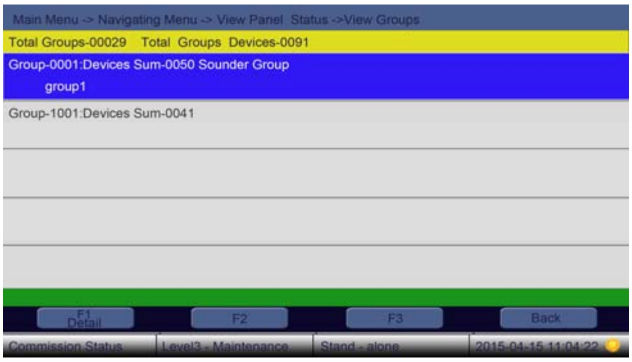
Figure 17

5.1.1.4 View Groups

This display the total numbers of group configured and the assigned devices on that particular group.

Main Menu taps **1 Navigating Menu** then tap **1 View Panel Status** and then taps **4 View Groups** and shows the details

For additional details about on the particular group configuration tap F1 tab.


Main Menu -> Navigating Menu -> View Panel Status ->View Groups
F1 Detail
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total Groups-00029   Total Groups Devices-0091

Group-0001:Devices Sum-0050 Sounder Group
group1

Group-1001:Devices Sum-0041

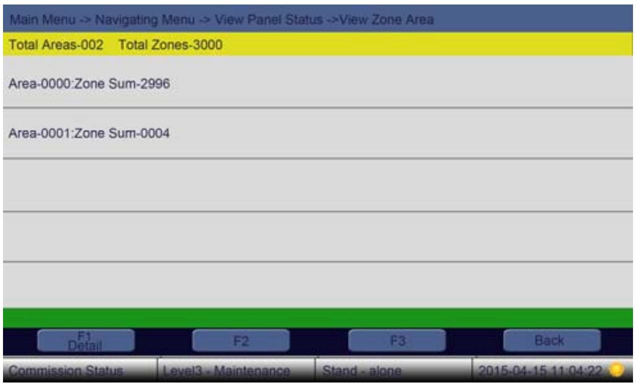
Figure 18

5.1.1.5 View Zone Area

This display the group of zones in a particular area

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **5 View Zone Area** and shows the details

For additional details about on the zone area tap F1 tab.


Main Menu -> Navigating Menu -> View Panel Status ->View Zone Area
F1 Detail
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total Areas-002   Total Zones-3000

Area-0000:Zone Sum-2996

Area-0001:Zone Sum-0004

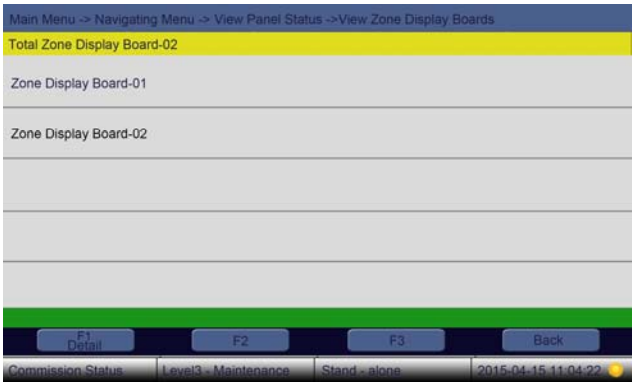
Figure 19

5.1.1.6 View Zone Display Board

This display the number of zones display board enrolled on the panel. Up to four zone display boards can install in the panel.

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **6 View Zone Area** and shows the details

For additional details about Zone Display Board tap F1.


Main Menu -> Navigating Menu -> View Panel Status ->View Zone Display Boards
F1 Detail
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total Zone Display Board-02

Zone Display Board-01

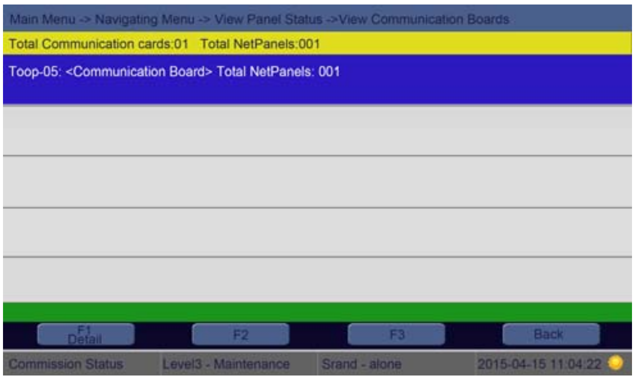
Zone Display Board-02

Figure 20

5.1.1.7 View Communication Board

This display communication interface details.

On the Main Menu tap **1 Navigating Menu** then tap **1 View Panel Status** and then tap **7 View Communication Boards** and shows the details


Main Menu -> Navigating Menu -> View Panel Status ->View Communication Boards
F1 Detail
F2
F3
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Total Communication cards:01 Total NetPanels:001

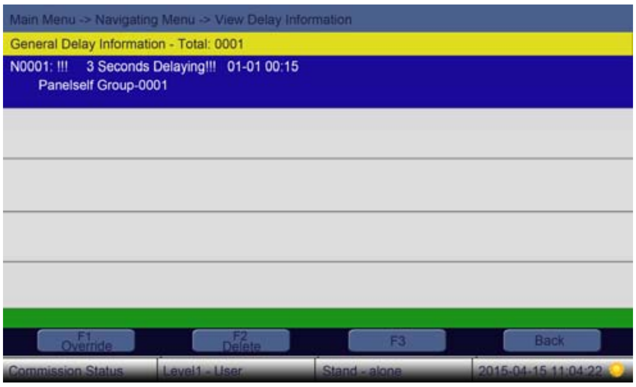
Toop-05: <Communication Board> Total NetPanels: 001

Figure 21

5.1.2 View Delay Information

This displays the delay time and associate configuration when active.

On the Main Menu tap **1 Navigating Menu** then tap **2 View Delay Information** and then shows the details


Main Menu -> Navigating Menu -> View Delay Information
F1 Override
F2 Delete
F3
Back
Commission Status
Level1 - User
Stand - alone
2015-04-15 11:04:22

General Delay Information - Total: 0001

N0001: !!! 3 Seconds Delaying!!! 01-01 00:15
Panelself Group-0001

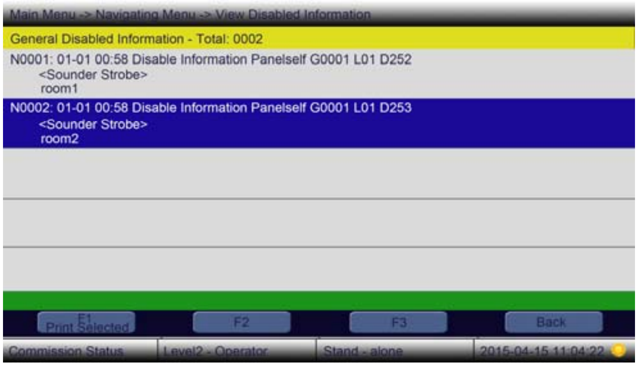
Figure 22

5.1.3 View Disable Information

This displays the disable information for the devices that this function is executed on.

On the Main Menu tap **1 Navigating Menu** then tap **3 View Disable Information** and then shows the details

The disabled device details can be printed by selecting it then tap the **F1** tab. It is also possible to enable the device directly by tapping the **F3** tab (need level 2 passcode).


Main Menu -> Navigating Menu -> View Disabled Information
F1 Print Selected
F2
F3
Back
Commission Status
Level2 - Operator
Stand - alone
2015-04-15 11:04:22

General Disabled Information - Total: 0002

N0001: 01-01 00:58 Disable Information Panelself G0001 L01 D252
<Sounder Strobe>
room1

N0002: 01-01 00:58 Disable Information Panelself G0001 L01 D253
<Sounder Strobe>
room2

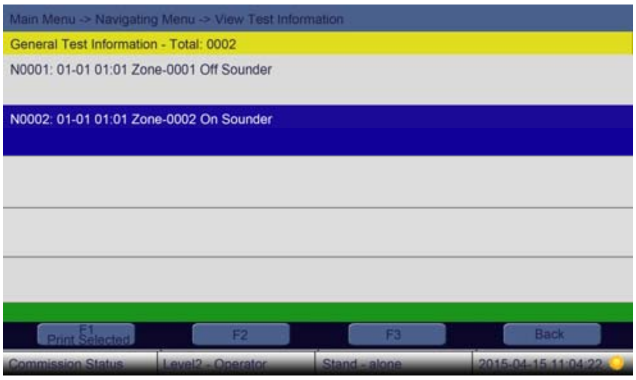
Figure 23

5.1.4 View Test Information

This display the test information for the devices, zones that this function is executed on.

On the Main Menu tap **1 Navigating Menu** then tap **4 View Test Information** and then shows the details

The test device details can be printed by selecting it then tap the **F1** tab.



Main Menu -> Navigating Menu -> View Test Information

General Test Information - Total: 0002

N0001: 01-01 01:01 Zone-0001 Off Sounder

N0002: 01-01 01:01 Zone-0002 On Sounder

F1
Print Selected
F2
F3
Back
Commission Status
Level2 - Operator
Stand - alone
2015-04-15 11:04:22

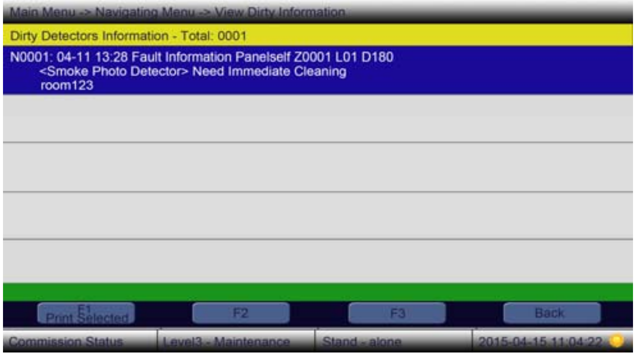
Figure 24

5.1.5 View Dirty Information

This displays information for the dirty a detector which required an immediate cleaning.

On the Main Menu tap **1 Navigating Menu** then tap **5 View Dirty Information** and then shows the details

The dirty detector details can be printed by selecting it then tap the **F1** tab.



Main Menu -> Navigating Menu -> View Dirty Information

Dirty Detectors Information - Total: 0001

N0001: 04-11 13:28 Fault Information Panelself Z0001 L01 D180
<Smoke Photo Detector> Need Immediate Cleaning
room123

F1
Print Selected
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 25

5.1.6 View Output Connection

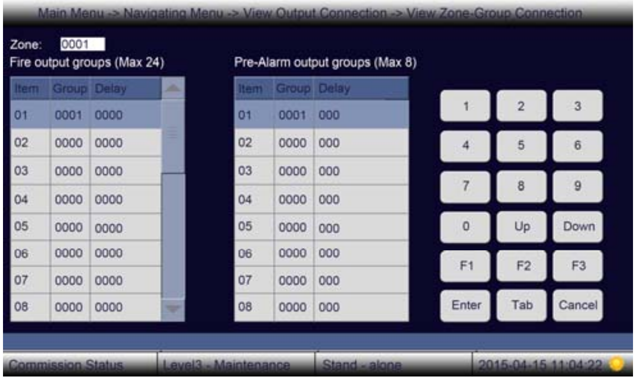
This display the output connection information, its divided into two [2] sub-menus namely View Zone-Group Connection and View Command Built.

5.1.6.1 View Zone-Group Connection

This display the particular zone associated with number of groups and its delay time details in the event of fire and pre-alarm scenario.

On the Main Menu tap **1 Navigating Menu** then tap **6 View Output Connection** and then tap **1 View Zone-Group Connection** and shows the details

For other zone details type the zone number on the zone box.



Main Menu -> Navigating Menu -> View Output Connection -> View Zone-Group Connection

Zone: 0001

Fire output groups (Max 24)

Item	Group	Delay
01	0001	0000
02	0000	0000
03	0000	0000
04	0000	0000
05	0000	0000
06	0000	0000
07	0000	0000
08	0000	0000

Pre-Alarm output groups (Max 8)

Item	Group	Delay
01	0001	000
02	0000	000
03	0000	000
04	0000	000
05	0000	000
06	0000	000
07	0000	000
08	0000	000

1
2
3
4
5
6
7
8
9
0
Up
Down
F1
F2
F3
Enter
Tab
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

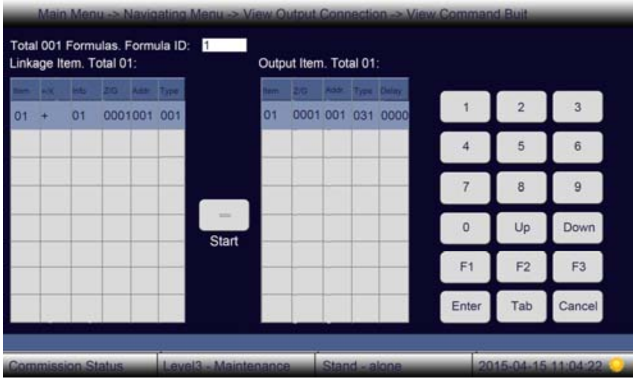
Figure 26

5.1.6.2 View Command Built

This displays the command build expanded formula between inputs and output devices.

On the Main Menu tap **1 Navigating Menu** then tap **6 View Output Connection** and then tap **2 View Command Built** and shows the details

For other formulas detail type the formula ID on the formula ID box.


Main Menu -> Navigating Menu -> View Output Connection -> View Command Built
Start
1
2
3
4
5
6
7
8
9
0
Up
Down
F1
F2
F3
Enter
Tab
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total 001 Formulas. Formula ID: 1

Linkage Item. Total 01:

Item	+/X	Info	Z/G	Addr	Type
01	+	01	0001	001	001

Output Item. Total 01:

Item	Z/G	Addr	Type	Delay
01	0001	001	031	0000

Figure 27

5.1.7 View History Log

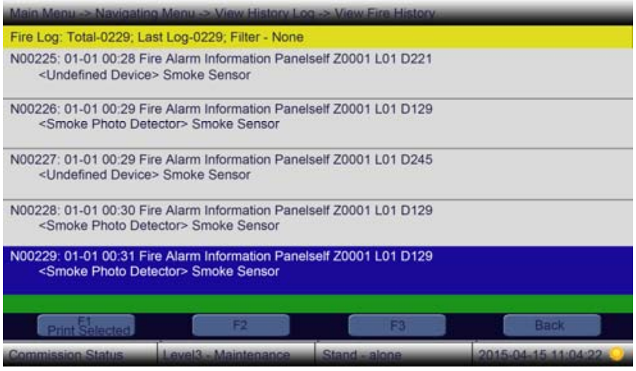
The History memory is divided into two parts namely View Fire History and View Entire History.

5.1.7.1 View Fire History

This displays the fire history information. The history capacity is 1000 stored in non-volatile memory.

On the Main Menu tap **1 Navigating Menu** then tap **7 View History Log** and then tap **1 View Fire History** and shows the details

The fire history details can be printed by selecting it then tap the **F1** tab.


Main Menu -> Navigating Menu -> View History Log -> View Fire History
F1 Print Selected
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

```
Fire Log: Total-0229; Last Log-0229; Filter - None
N00225: 01-01 00:28 Fire Alarm Information Panelself Z0001 L01 D221
      <Undefined Device> Smoke Sensor
N00226: 01-01 00:29 Fire Alarm Information Panelself Z0001 L01 D129
      <Smoke Photo Detector> Smoke Sensor
N00227: 01-01 00:29 Fire Alarm Information Panelself Z0001 L01 D245
      <Undefined Device> Smoke Sensor
N00228: 01-01 00:30 Fire Alarm Information Panelself Z0001 L01 D129
      <Smoke Photo Detector> Smoke Sensor
N00229: 01-01 00:31 Fire Alarm Information Panelself Z0001 L01 D129
      <Smoke Photo Detector> Smoke Sensor
```

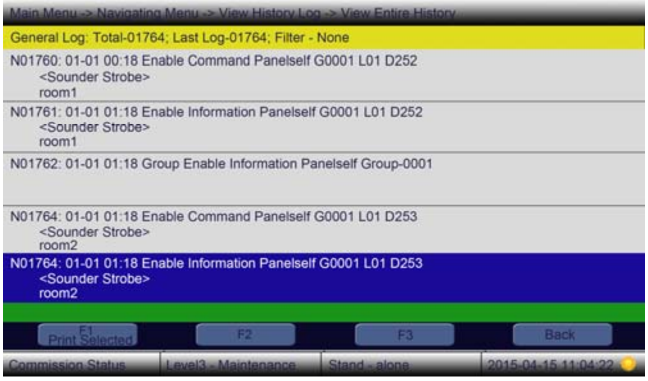
Figure 28

5.1.7.2 View Entire History

This display all the history information. The history capacity is 10,000 stored in non-volatile memory

On the Main Menu tap **1 Navigating Menu** then tap **7 View History Log** and then tap **2 View Entire History** and shows the details

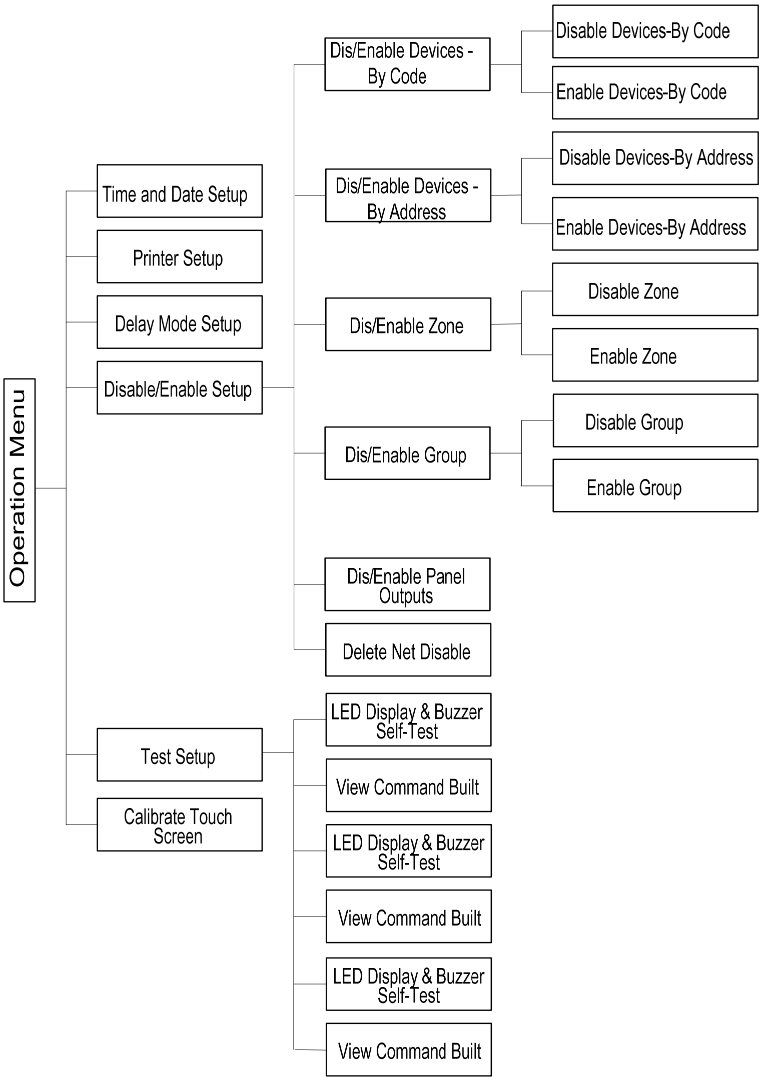
The history details can be printed by selecting it then tap the **F1** tab.


Main Menu -> Navigating Menu -> View History Log -> View Entire History
F1 Print Selected
F2
F3
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

```
General Log: Total-01764; Last Log-01764; Filter - None
N01760: 01-01 00:18 Enable Command Panelself G0001 L01 D252
      <Sounder Strobe>
      room1
N01761: 01-01 01:18 Enable Information Panelself G0001 L01 D252
      <Sounder Strobe>
      room1
N01762: 01-01 01:18 Group Enable Information Panelself Group-0001
N01764: 01-01 01:18 Enable Command Panelself G0001 L01 D253
      <Sounder Strobe>
      room2
N01764: 01-01 01:18 Enable Information Panelself G0001 L01 D253
      <Sounder Strobe>
      room2
```

Figure 29

5.2 Operation Menu Hierarchy


Operation Menu
Time and Date Setup
Printer Setup
Delay Mode Setup
Disable/Enable Setup
Test Setup
Calibrate Touch Screen
Dis/Enable Devices - By Code
Dis/Enable Devices - By Address
Dis/Enable Zone
Dis/Enable Group
Dis/Enable Panel Outputs
Delete Net Disable
LED Display & Buzzer Self-Test
View Command Built
LED Display & Buzzer Self-Test
View Command Built
LED Display & Buzzer Self-Test
View Command Built
Disable Devices-By Code
Enable Devices-By Code
Disable Devices-By Address
Enable Devices-By Address
Disable Zone
Enable Zone
Disable Group
Enable Group

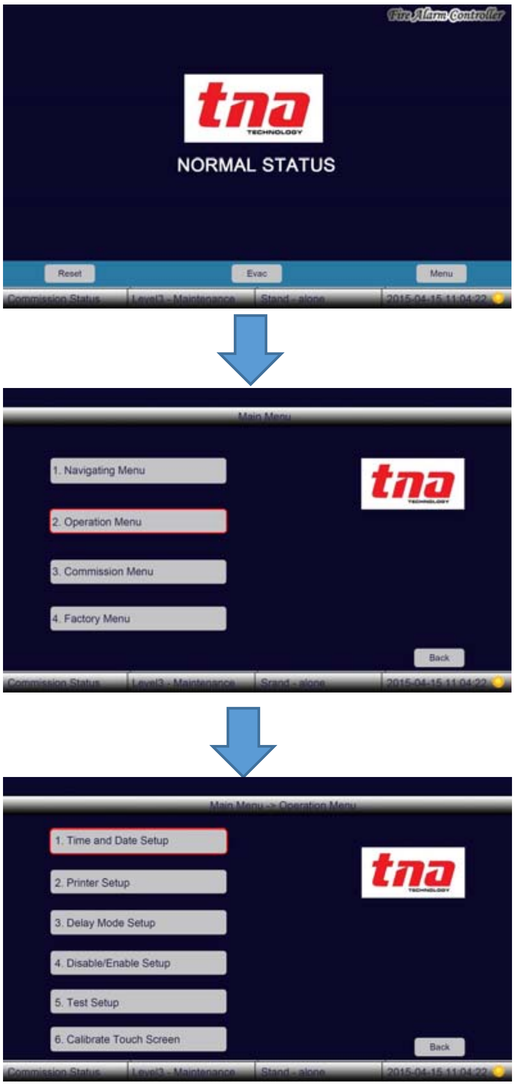

Fire Alarm Controller
tna
NORMAL STATUS
Reset
Evac
Menu
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22
Main Menu
1. Navigating Menu
2. Operation Menu
3. Commission Menu
4. Factory Menu
Back
Main Menu -> Operation Menu
1. Time and Date Setup
2. Printer Setup
3. Delay Mode Setup
4. Disable/Enable Setup
5. Test Setup
6. Calibrate Touch Screen
Back

Figure 30

Figure31

Operation Menu

This menu provides system operation and function. To access in this menu level 2 is required.

5.2.1 Time and Date Setup

Selecting this option user allows to set the current time and date.

On the Main Menu tap **2 Operation Menu** then tap **1 Time and Date Setup** and shows present time and date

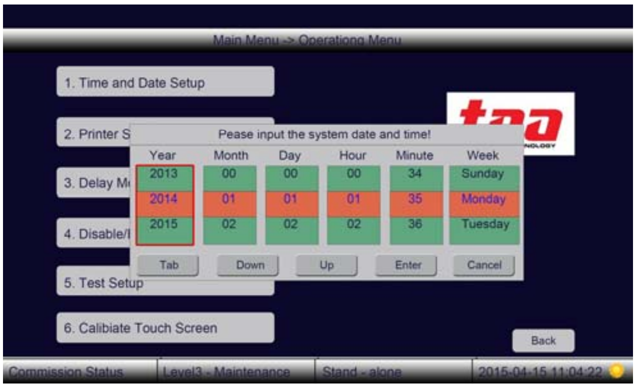

Main Menu -> Operationg Menu
1. Time and Date Setup
2. Printer S
3. Delay M
4. Disable/
5. Test Setup
6. Calibiate Touch Screen
Pease input the system date and time!
Year
Month
Day
Hour
Minute
Week
2013
2014
2015
00
01
02
00
01
02
00
01
02
34
35
36
Sunday
Monday
Tuesday
Tab
Down
Up
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 32

5.2.2 Printer Setup

Selecting this option user allow to set the printer for intended application.

On the Main Menu tap **2 Operation Menu** then tap **2 Printer Setup** and shows the option buttons.

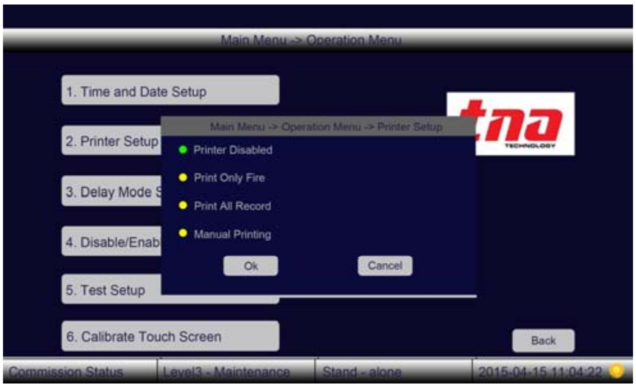

Main Menu -> Operation Menu
1. Time and Date Setup
2. Printer Setup
3. Delay Mode S
4. Disable/Enab
5. Test Setup
6. Calibrate Touch Screen
Main Menu -> Operation Menu -> Printer Setup
● Printer Disabled
● Print Only Fire
● Print All Record
● Manual Printing
Ok
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 33

5.2.3 Delay Mode Setup

Selecting this option user allow to disable or enable the delay mode.

Disable Delay mode, clicking this round button disable the delay time made from Command Builder and set the panel into Night mode.

Enable Delay mode, clicking this round button allows the panel to active the "**Day/Night Timer**", the panel can switch the day and the night mode automatic.

Disable Delay mode Led indicator, In Enable Delay mode, clicking this round button allows the panel turn-off 'delay mode' LED indicator

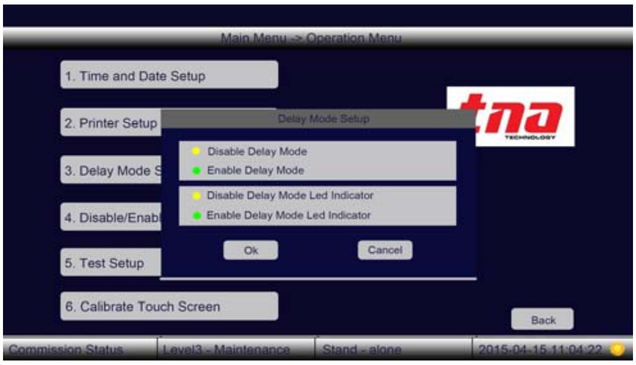

Main Menu -> Operation Menu
1. Time and Date Setup
2. Printer Setup
3. Delay Mode S
4. Disable/Enab
5. Test Setup
6. Calibrate Touch Screen
Delay Mode Setup
● Disable Delay Mode
● Enable Delay Mode
● Disable Delay Mode Led Indicator
● Enable Delay Mode Led Indicator
Ok
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 34

Enable Delay mode Led indicator, In Enable Delay mode clicking this round button allows the panel illuminate 'delay mode' LED indicator

On the Main Menu tap **2 Operation Menu** then tap **3 Delay Mode Setup** and shows the option buttons then tap **OK** tab.

5.2.4 Disable/Enable Setup

Any or group of devices enrolled onto the panel can be disable through manual operation by entering the address, group, zone and panel detail. Once it is disabled, even performing reset or turning off the panel will not operationally resume any device or group unless it is manually Enable in these setup. Selecting this option user allows to disable or enable for the purpose of maintenance application.

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and view the sub-menus.

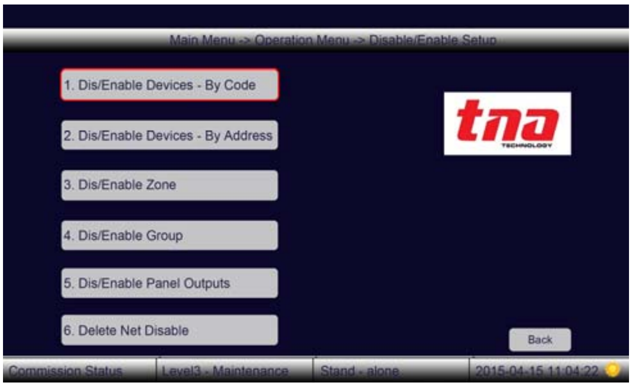

Main Menu -> Operation Menu -> Disable/Enable Setup
1. Dis/Enable Devices - By Code
2. Dis/Enable Devices - By Address
3. Dis/Enable Zone
4. Dis/Enable Group
5. Dis/Enable Panel Outputs
6. Delete Net Disable
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 35

5.2.4.1 Dis/Enable Devices by Code

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **1 Dis/Enable by Code** and then tap **1 Disable Device by Code** or **2 Enable Device by Code** then type the Zone, device address and type number.

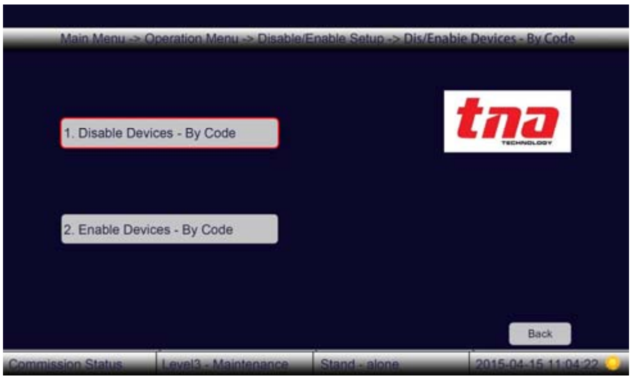
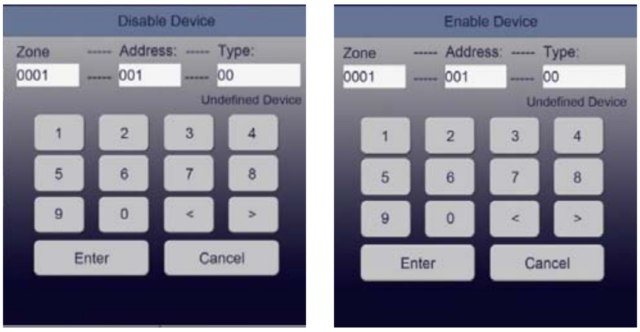

Main Menu -> Operation Menu -> Disable/Enable Setup -> Dis/Enable Devices - By Code
1. Disable Devices - By Code
2. Enable Devices - By Code
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 36


Disable Device
Zone
Address:
Type:
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Enable Device
Zone
Address:
Type:
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Zone: 0001 ----- Address: 001 ----- Type: 00
Undefined Device

Disable by Code Enable by Code

Figure 37

5.2.4.2 Dis/Enable Devices by Address

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **2 Dis/Enable by Address** and then tap **1 Disable Device by Address** or **2 enable Device by Address** then type the loop and device address number.

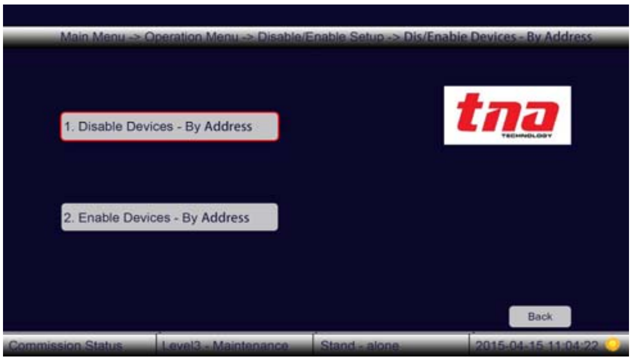
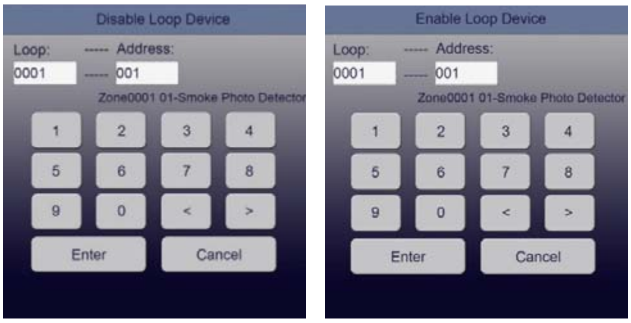

Main Menu -> Operation Menu -> Disable/Enable Setup -> Dis/Enable Devices - By Address
1. Disable Devices - By Address
2. Enable Devices - By Address
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 38


Disable Loop Device
Loop:
Address:
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Enable Loop Device
Loop:
Address:
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Loop: 0001 ----- Address: 001
Zone0001 01-Smoke Photo Detector

Disable by Address Enable by Address

Figure 39

5.2.4.3 Dis/Enable Devices by Zone

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **3 Dis/Enable Zone** and then tap **1 Disable Device Zone** or **2 Enable Device Zone** then type the Zone number.

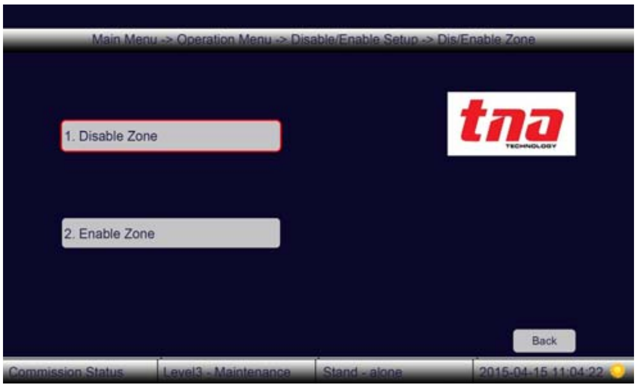
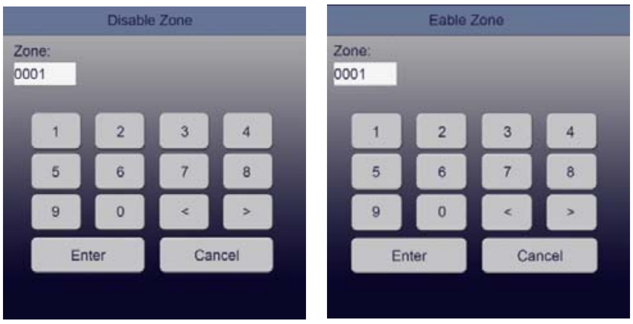

Main Menu -> Operation Menu -> Disable/Enable Setup -> Dis/Enable Zone
1. Disable Zone
2. Enable Zone
tna
TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 40


Disable Zone
Eable Zone
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Zone: 0001

Zone: 0001

Disable Zone Enable Zone

Figure 41

5.2.4.4 Dis/Enable Devices by Group

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **4 Dis/Enable Group** and then tap **1 Disable Device Group** or **2 Enable Device Group** then type the Group number.

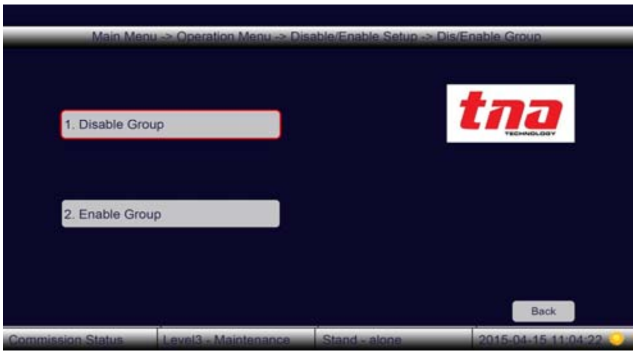
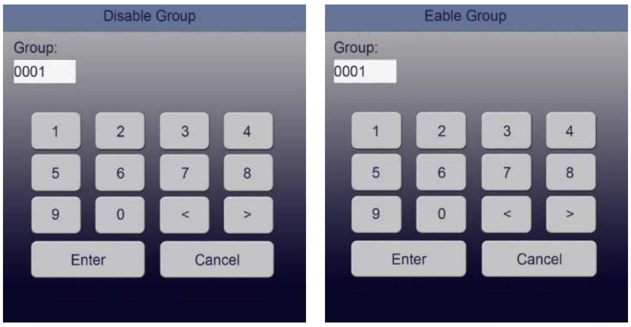

Main Menu -> Operation Menu -> Disable/Enable Setup -> Dis/Enable Group
1. Disable Group
2. Enable Group
tna
TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 42


Disable Group
Eable Group
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Group: 0001

Group: 0001

Disable Group Enable Group

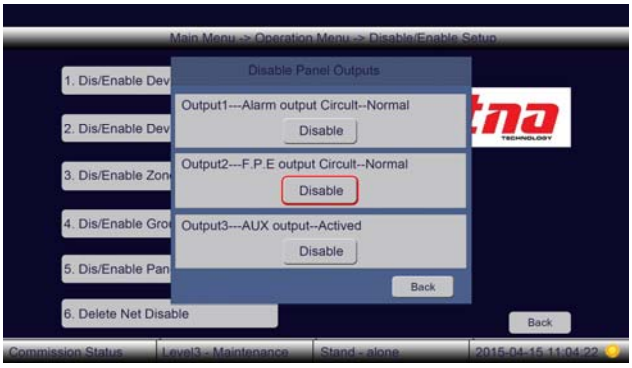
Figure 43

5.2.4.5 Dis/Enable Panel Output

Selecting this option user allows to disable the panel output and by Default panel outputs are all enable.

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **5 Dis/Enable Panel Outputs** and then tap desire disable option.

Note: Output 3 cannot be disabled


Main Menu -> Operation Menu -> Disable/Enable Setup
1. Dis/Enable Dev
2. Dis/Enable Dev
3. Dis/Enable Zon
4. Dis/Enable Gro
5. Dis/Enable Pan
6. Delete Net Disable
Disable Panel Outputs
Disable
Disable
Disable
Back
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Output1---Alarm output Circuit--Normal

Output2---F.P.E output Circuit--Normal

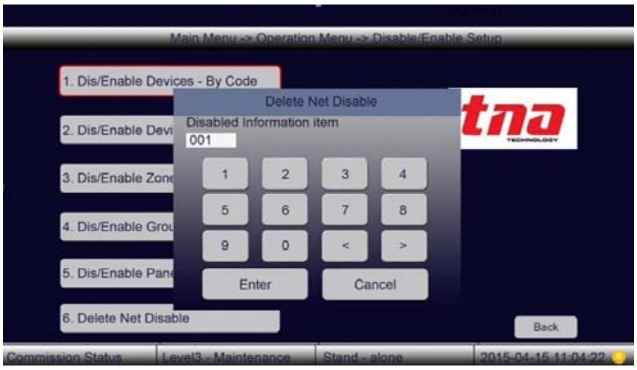
Output3---AUX output--Actived

Figure 44

5.2.4.6 Delete Net Disable

Selecting this option user allows to delete the disable Information from the network.

On the Main Menu tap **2 Operation Menu** then tap **4 Disable/Enable Setup** and then tap **6 Delete Net Disable** and then type Enter


Main Menu -> Operation Menu -> Disable/Enable Setup
1. Dis/Enable Devices - By Code
2. Dis/Enable Devi
3. Dis/Enable Zone
4. Dis/Enable Grou
5. Dis/Enable Pane
6. Delete Net Disable
Delete Net Disable
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Disabled Information item
001

Figure 45

5.2.5 Test Setup

Any zone of devices enrolled into the panel can be tested through manual operation by entering the zone detail including LED and panel buzzer. Selecting this option user allow to test the system.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then view the sub-menus.

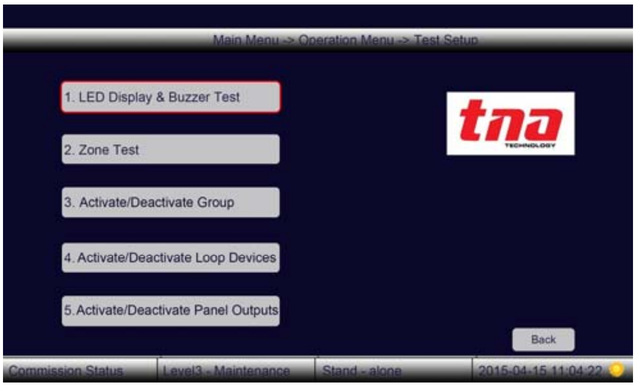

Main Menu -> Operation Menu -> Test Setup
1. LED Display & Buzzer Test
2. Zone Test
3. Activate/Deactivate Group
4. Activate/Deactivate Loop Devices
5. Activate/Deactivate Panel Outputs
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 46

5.2.5.1 LED Display & Buzzer Test

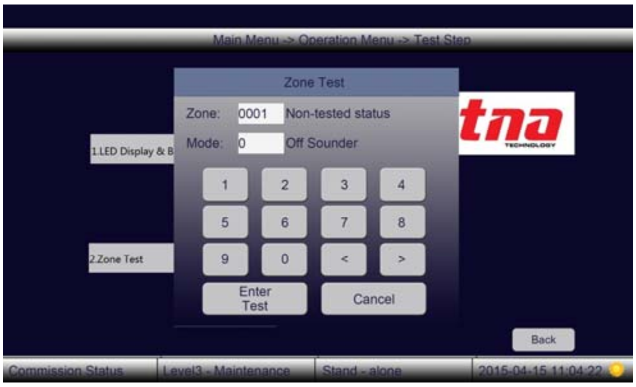
Selecting this option user allow to test all panel LED indicators and built-in buzzer functionality.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then tap **1 LED Display & Buzzer Test** and then all LED's singly turn-on and alarm the buzzer, when done it stop automatically.

5.2.5.2 Zone Test

This option user allows setting a particular zone onto Test Mode. When testing, even performing system reset will not go out this mode unless it is manually Cancel in these setup.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then tap **2 Zone Test** and then type the zone number and click **Enter.**


Main Menu -> Operation Menu -> Test Step
1.LED Display & B
2.Zone Test
Zone Test
1
2
3
4
5
6
7
8
9
0
<
>
Enter Test
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Zone: 0001 Non-tested status
Mode: 0 Off Sounder

Figure 47

Three things to be observed during test mode:

1. On the Zone Indication Panel, the corresponding zone number YELLOW LED is steady. And the TEST mode LED illuminate steady.
2. When a Fire signal from the Zone under the test mode, the screen display and print the fire event details, meanwhile the corresponding zone number LED illuminate steady.
3. Sounder Options, ON and OFF. On the Mode box type 0 to OFF-mode or type 1 to ON-mode. **OFF-mode**, all the alarm warning device such as sounder, strobe and etc., assigned to zone will not alarm.
   ON-mode, all the alarm warning device such as sounder, strobe and etc., assigned to zone will alarm within 10 seconds and then automatically stop.

Note: After the testing is done do not keep the control panel under the test mode. It is recommended to exit the test mode before leaving the site.

5.2.5.3 Activate/Deactivate Group

Selecting this option user allow to set a particular group onto Test Mode.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then tap **3 Activate/Deactivate Group** and the tap **1 Activate Group** or **2 Deactivate Group** then type the group number

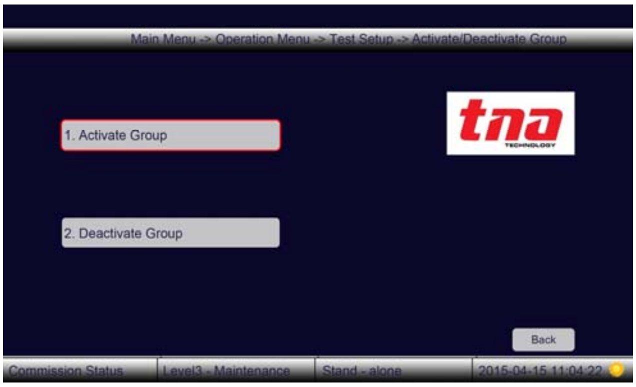
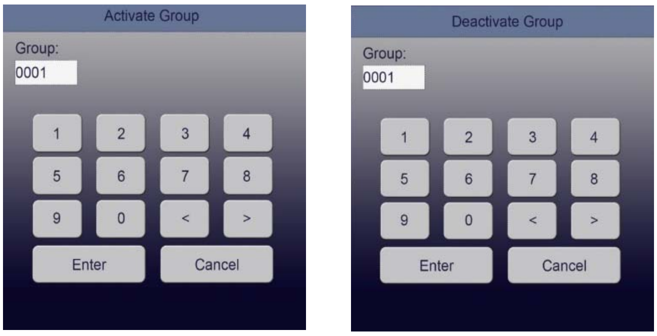

Main Menu -> Operation Menu -> Test Setup -> Activate/Deactivate Group
1. Activate Group
2. Deactivate Group
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 48


Activate Group
Deactivate Group
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Group: 0001

Group: 0001

1 Activate Group

2 Deactivate Group

Figure 49

5.2.5.4 Activate/Deactivate Loop Devices

Selecting this option user allow to set a particular device in the loop to test mode.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then tap **4 Activate/Deactivate Loop Devices** and the tap **1 Activate Loop Device** or **2 Deactivate Loop Device** then type the zone, address and type number

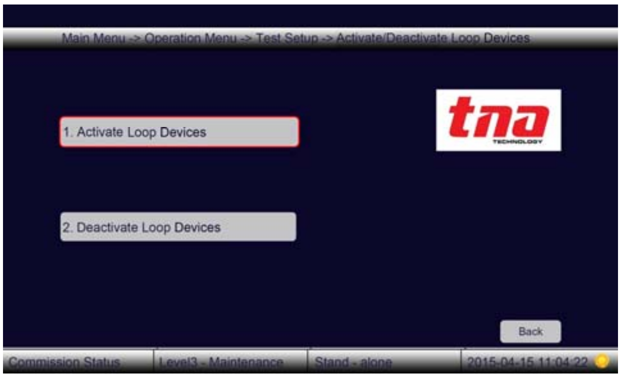
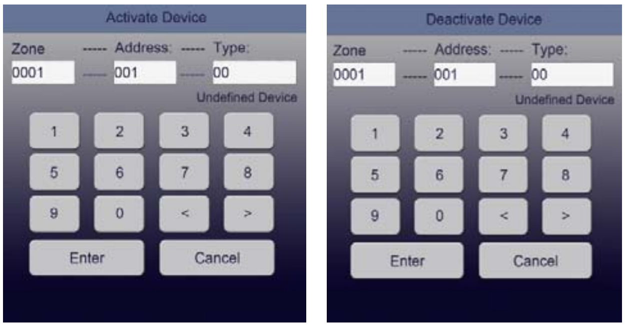

Main Menu -> Operation Menu -> Test Setup -> Activate/Deactivate Loop Devices
1. Activate Loop Devices
2. Deactivate Loop Devices
tna TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 50


Activate Device
Deactivate Device
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel

Zone ----- Address: ----- Type:
0001 ----- 001 ----- 00
Undefined Device

1 Activate Loop Device   2 Deactivate Loop

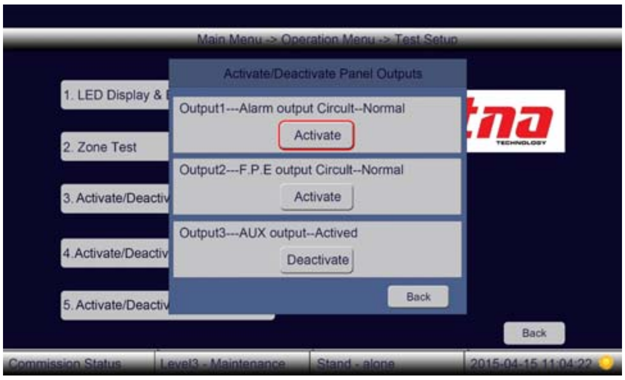
Figure 51

5.2.5.5 Activate/Deactivate Panel Output

Selecting this option user allow to test panel outputs circuits for maintenance application.

On the Main Menu tap **2 Operation Menu** then tap **5 Test Setup** and then tap **4 Activate/Deactivate Panel Output** and the tap **Activate** on the output that desire to test.

Note: Output 3 is excluded in this option.


Main Menu -> Operation Menu -> Test Setup
1. LED Display & I
2. Zone Test
3. Activate/Deactiv
4.Activate/Deactiv
5. Activate/Deactiv
Activate/Deactivate Panel Outputs
Activate
Activate
Deactivate
Back
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Output1---Alarm output Circuit--Normal

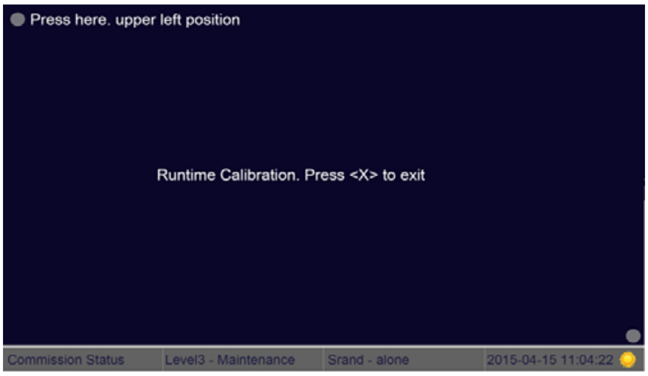
Output2---F.P.E output Circuit--Normal

Output3---AUX output--Actived

Figure 52

5.2.6 Calibrate Touch Screen

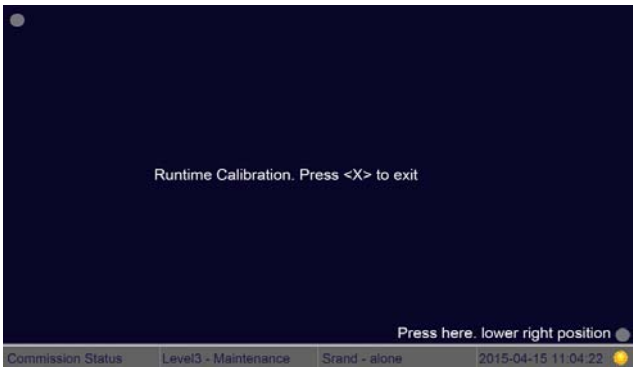
Selecting this option user allow to calibrate when the touch screen response inaccurate and erratic.


Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Press here. upper left position

Runtime Calibration. Press <X> to exit

Figure 53: The first step Figure


Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Runtime Calibration. Press <X> to exit

Press here. lower right position

Figure 54: The second step

5.3 Commission Menu Hierarchy

(PART 1)

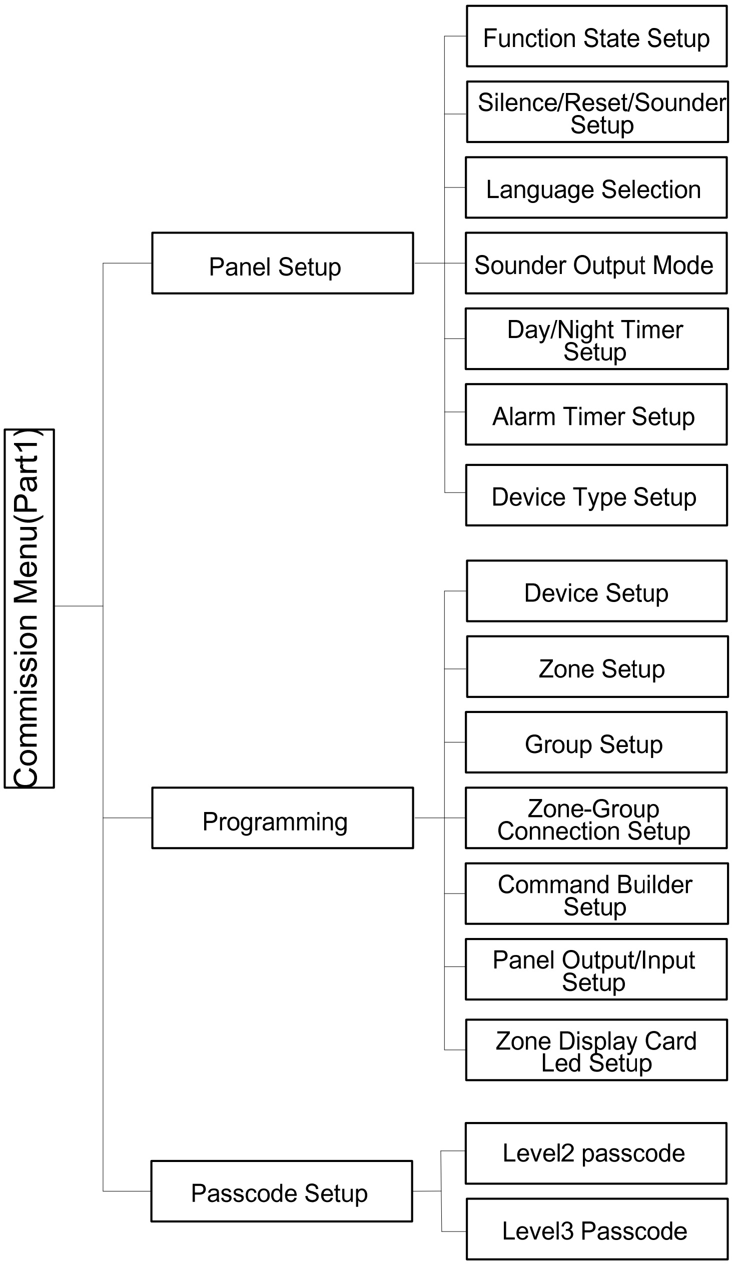

Commission Menu(Part1)
Panel Setup
Function State Setup
Silence/Reset/Sounder Setup
Language Selection
Sounder Output Mode
Day/Night Timer Setup
Alarm Timer Setup
Device Type Setup
Programming
Device Setup
Zone Setup
Group Setup
Zone-Group Connection Setup
Command Builder Setup
Panel Output/Input Setup
Zone Display Card Led Setup
Passcode Setup
Level2 passcode
Level3 Passcode

Figure 55

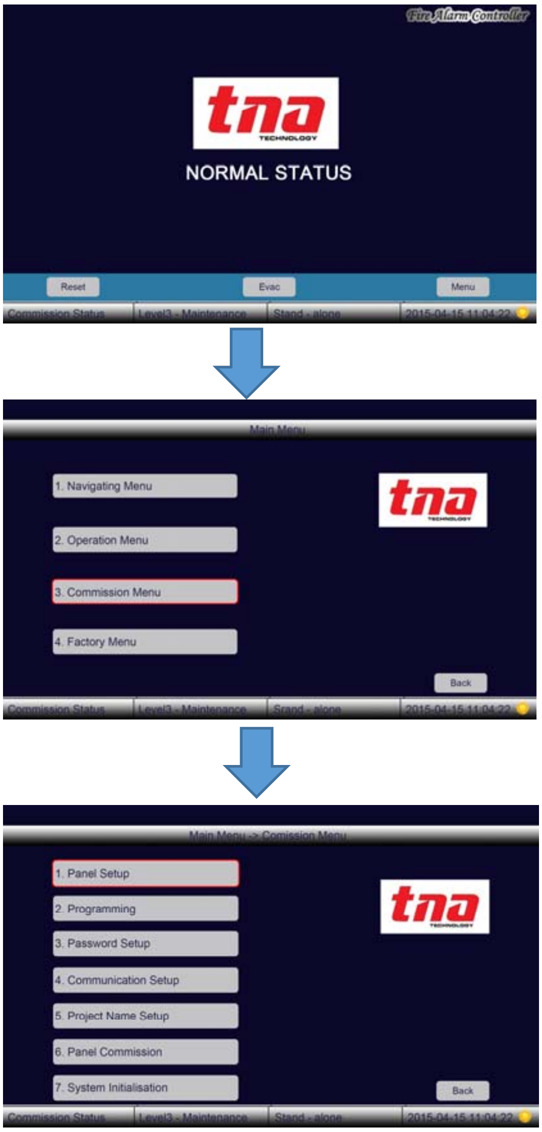

Fire Alarm Controller
NORMAL STATUS
Reset
Evac
Menu
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22
Main Menu
1. Navigating Menu
2. Operation Menu
3. Commission Menu
4. Factory Menu
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22
Main Menu -> Comission Menu
1. Panel Setup
2. Programming
3. Password Setup
4. Communication Setup
5. Project Name Setup
6. Panel Commission
7. System Initialisation
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 56

Commission Menu

This menu provides main system programming functions of the control panel. To access in this menu level 3 is required.

(PART 2)

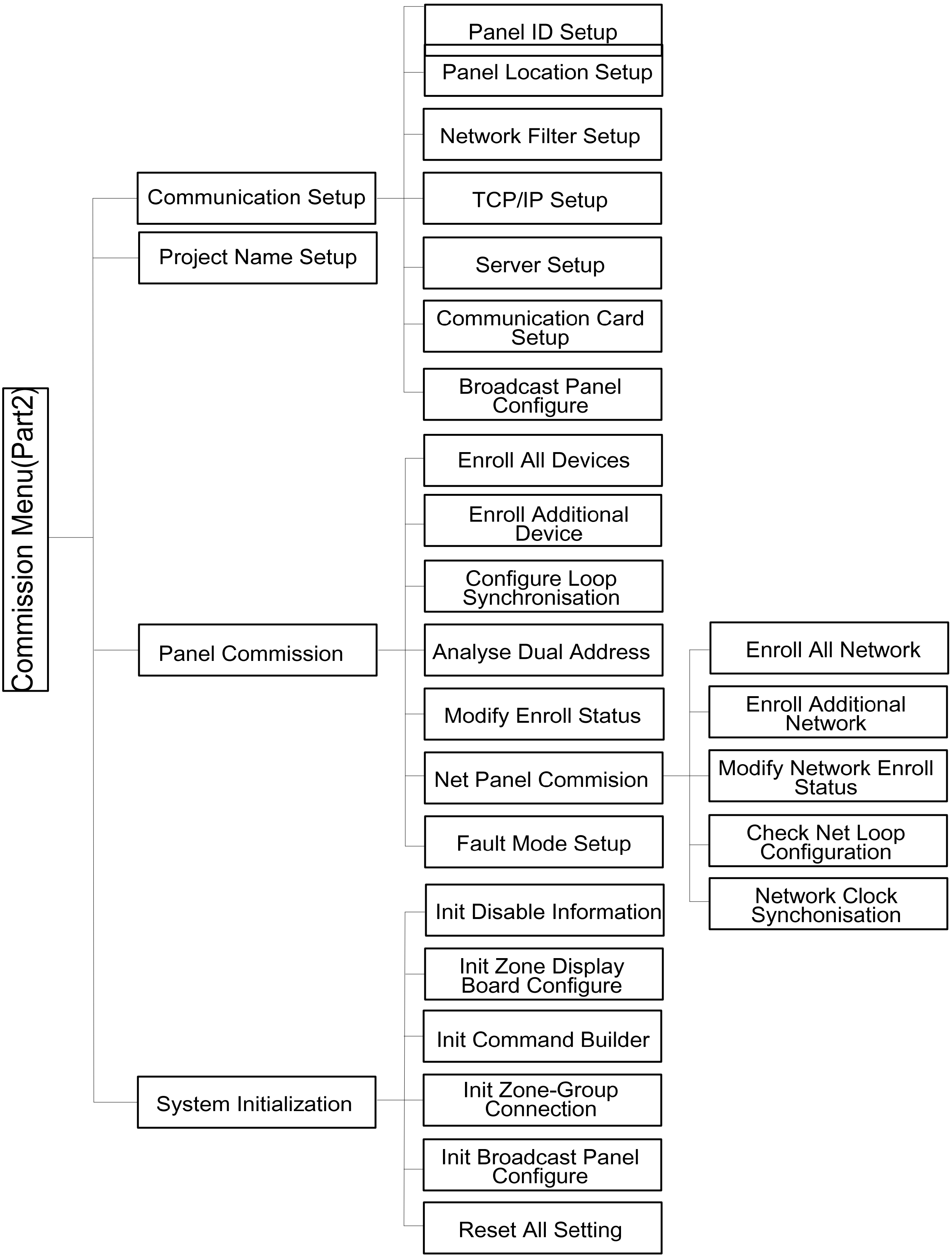

Commission Menu(Part2)
Communication Setup
Project Name Setup
Panel Commission
System Initialization
Panel ID Setup
Panel Location Setup
Network Filter Setup
TCP/IP Setup
Server Setup
Communication Card Setup
Broadcast Panel Configure
Enroll All Devices
Enroll Additional Device
Configure Loop Synchronisation
Analyse Dual Address
Modify Enroll Status
Net Panel Commision
Fault Mode Setup
Enroll All Network
Enroll Additional Network
Modify Network Enroll Status
Check Net Loop Configuration
Network Clock Synchonisation
Init Disable Information
Init Zone Display Board Configure
Init Command Builder
Init Zone-Group Connection
Init Broadcast Panel Configure
Reset All Setting

Figure 57

5.3.1 Panel Setup

Selecting this feature user allow to made important operating panel setting. The Panel Setup is divided into seven [7] sub-menus.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then view the sub-menus

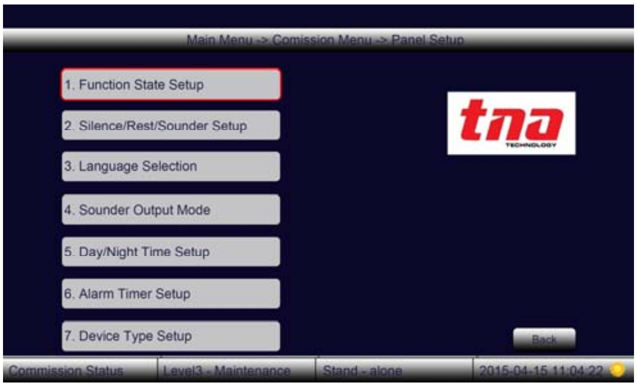

Main Menu -> Comission Menu -> Panel Setup
1. Function State Setup
2. Silence/Rest/Sounder Setup
3. Language Selection
4. Sounder Output Mode
5. Day/Night Time Setup
6. Alarm Timer Setup
7. Device Type Setup
tna TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 58

5.3.1.1 Function State Setup

Selecting this feature user allow to gain access in any programming menu. The Commission mode has a full access in common and commission menus while monitoring mode allow common and operation menus.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **1 Function State Setup** and then show the option buttons.

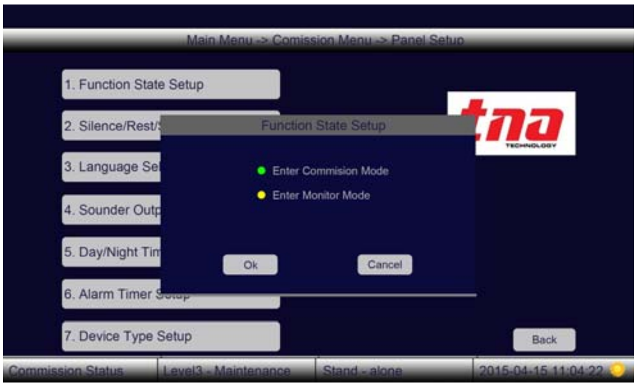

Main Menu -> Comission Menu -> Panel Setup
1. Function State Setup
2. Silence/Rest/
3. Language Se
4. Sounder Outp
5. Day/Night Tin
6. Alarm Timer S
7. Device Type Setup
Function State Setup
Enter Commision Mode
Enter Monitor Mode
Ok
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 59

5.3.1.2 Silence/Reset/Sounder Setup

Selecting this feature user allow to change the reset, silence and re-sound setting.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **2 Silence/Reset/Sounder Setup** and then show the option button, click the desire feature than click **Okay**.

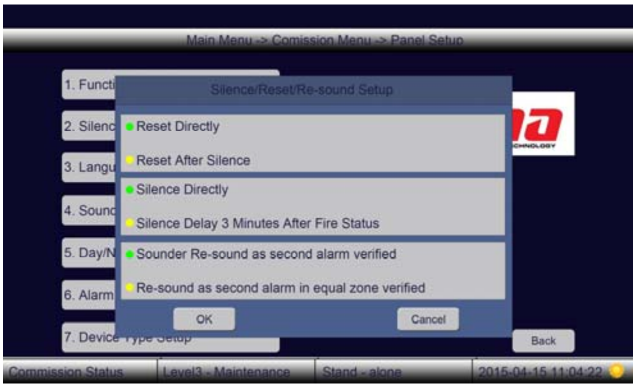
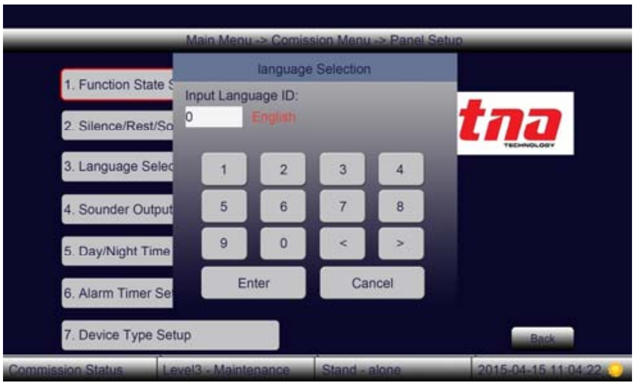

Main Menu -> Comission Menu -> Panel Setup
1. Functi
2. Silenc
3. Langu
4. Sounc
5. Day/N
6. Alarm
7. Device Type Setup
Silence/Reset/Re-sound Setup
Reset Directly
Reset After Silence
Silence Directly
Silence Delay 3 Minutes After Fire Status
Sounder Re-sound as second alarm verified
Re-sound as second alarm in equal zone verified
OK
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 60

5.3.1.3 Language Selection

Selecting this feature allow user to select his language.
Note: Other languages will be added in the future.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **3 Language Selection** and then show the option button.


Main Menu -> Comission Menu -> Panel Setup
1. Function State S
2. Silence/Rest/So
3. Language Selec
4. Sounder Output
5. Day/Night Time
6. Alarm Timer Se
7. Device Type Setup
language Selection
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Input Language ID: 0 English

Figure 61

5.3.1.4 Sounder Output Mode

Selecting this feature allows the user to control the sounder activation.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **4 Sounder Output Mode** and then show the option button

Description:
Activate all sounder groups if selected, all the sounders in the loop will activate once a fire is detected by the panel.

Active by the linkage if selected, to the user can activate the loop sounders according to the predefined formula through Command Builder or Zone Group Connection.

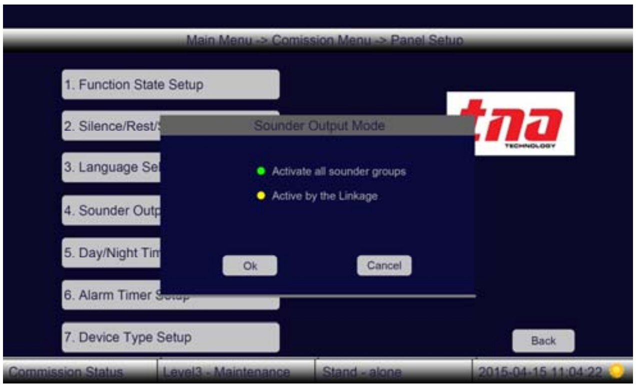
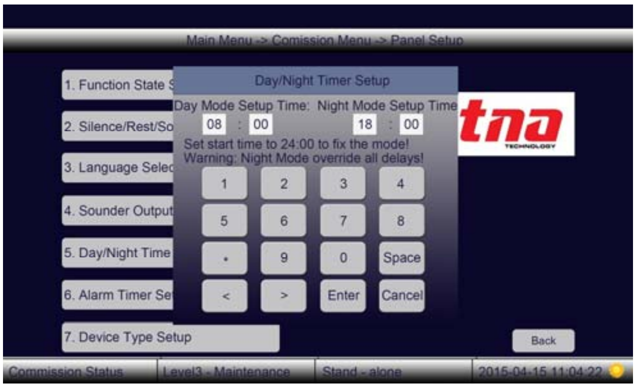

Main Menu -> Comission Menu -> Panel Setup
1. Function State Setup
2. Silence/Rest/
3. Language Sel
4. Sounder Outp
5. Day/Night Tim
6. Alarm Timer
7. Device Type Setup
Sounder Output Mode
● Activate all sounder groups
● Active by the Linkage
Ok
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 62

5.3.1.5 Day/Night Timer Setup

Selecting this feature user allow to set day night time by typing onto the timer box. It only actives when the "**Delay Mode Setup**" is set to "**Enable Mode**". Once the Day mode is activated all of outputs delays which have been configured on the Command Builder will operate while on Night mode the all outputs delays are not permitted.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **5 Day/Night Setup** and then show the option button.


Main Menu -> Comission Menu -> Panel Setup
1. Function State S
2. Silence/Rest/So
3. Language Selec
4. Sounder Output
5. Day/Night Time
6. Alarm Timer Se
7. Device Type Setup
Day/Night Timer Setup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Day Mode Setup Time: 08 : 00
Night Mode Setup Time 18 : 00
Set start time to 24:00 to fix the mode!
Warning: Night Mode override all delays!

Figure 63

5.3.1.6 Alarm Timer Setup

Selecting this feature user allow to set the timer for each day of a week. Once the alarm timer is set up, it can be added on the Command Builder under the Linkage item as input parameters.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **6 Alarm Timer Setup** and then type the time on the box.

Description: (refers to Command Builder)
Info type **11** refers to Timer 1 setting
Info type **12** refers to Timer 2 setting
Info type **13** refers to Timer 3 setting

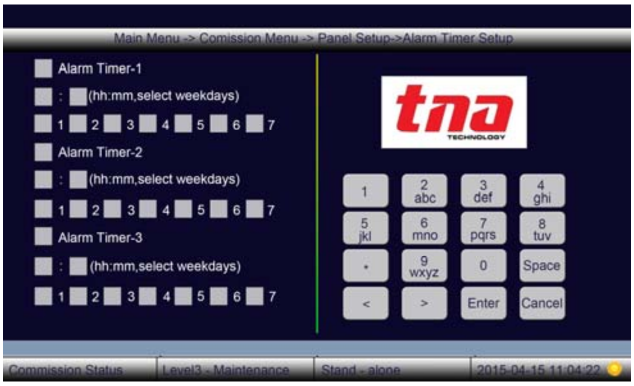
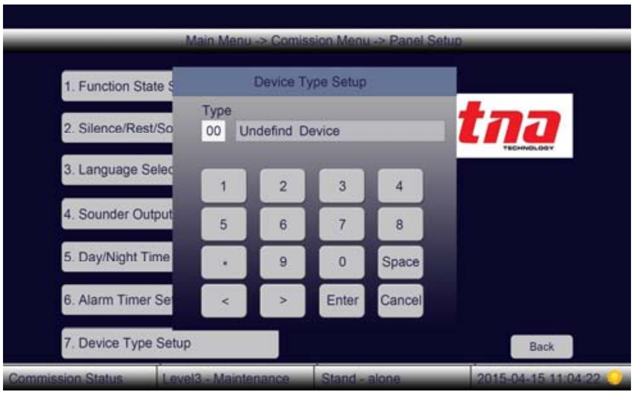

Main Menu -> Comission Menu -> Panel Setup->Alarm Timer Setup
Alarm Timer-1
: (hh:mm,select weekdays)
1 2 3 4 5 6 7
Alarm Timer-2
: (hh:mm,select weekdays)
1 2 3 4 5 6 7
Alarm Timer-3
: (hh:mm,select weekdays)
1 2 3 4 5 6 7
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
.
9 wxyz
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 64

5.3.1.7 Device Type Setup

Selecting this feature user allow to set device type name of each device.

On the Main Menu tap **3 Commission Menu** then tap **1 Panel Set-up** and then tap **7 Device Type** and then type the device name.


Main Menu -> Comission Menu -> Panel Setup
1. Function State S
2. Silence/Rest/So
3. Language Selec
4. Sounder Output
5. Day/Night Time
6. Alarm Timer Se
7. Device Type Setup
Device Type Setup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Type
00 Undefind Device

Figure 65

Lists of Device Type

Signal Type	No.	Device Type	Signal Type	No.	Device Type
Undefined	0	UNDEFINED			
Fire Alarm [Zone]	1	Smoke Photo Detector	**Supervisory (Unlatched)**	46	Photo-SupervAR
	2	User-Defined		47	User-Defined
	3	Smoke Ion Detector		48	Tamper
	4	User-Defined		49	User-Defined
	5	Heat Detector		50	Supervisory-AR3
	6	User-Defined		51	HVAC OVERRIDE4
	7	Smoke DuctP. Detector		52	User-Defined
	8	User-Defined		53	Process-Monitor-AR2, 3
	9	Photo w/Heat Detector		54	User-Defined
	10	User-Defined		55	Sounder Strobe
	11	ADAPT	**Activation [Sounder Group]**	56	User-Defined
	12	User-Defined		57	User-Defined
	13	Beam Detector		58	Sounder
	14	User-Defined		59	User-Defined
	15	Gas Detector		60	Strobe
	16	User-Defined		61	User-Defined
	17	Flame Detector	**Activation [Common Group]**	62	Lift
	18	User-Defined		63	Fire Damper
	19	Water Flow Switch		64	Fire Door
	20	User-Defined		65	AHU
	21	Monitor		66	Extract Fan
	22	User-Defined		67	BMS
	23	Smoke-Conventional		68	Broadcast

Fire Alarm [Zone]	24	User-Defined		69	User-Defined
	25	Heat-Conventional		70	User-Defined
	26	User-Defined		71	User-Defined
	27	Pull-Station		72	User-Defined
	28	User-Defined		73	User-Defined
	29	MCP (BG)		74	User-Defined
	30	User-Defined		75	User-Defined
Supervisory (Latched)	31	Duct-Supervisory	**Fault**	76	Power-Monitor
	32	User-Defined		77	Repeator
	33	Medic-Alert		78	Trouble-Monitor
	34	User-Defined		79	User-Defined
	35	Hazard-Alert2		80	User-Defined
	36	User-Defined	**Input (For Future Use)**	81	Ack-Switch
	37	Tornado-Alert2		82	Silence-Switch
	38	User-Defined		83	Reset-Switch
	39	Supervisory		84	Evac-Switch
	40	User-Defined		85	PAS-Bypass
	41	Process-Monitor2		86	HVAC Restart4
	42	User-Defined		87	Evac-Switch-AR3
	43	Zone Valve		88	Day_Night_Switch
	44	Flow Switch		89	User-Defined
	45	Pressure Switch		90	User-Defined

5.3.2 Programming

Selecting this feature user allow to program the control panel parameters, text description and fire scenario procedures. The Programming is divided into seven [7] sub-menus.

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then view the sub-menus

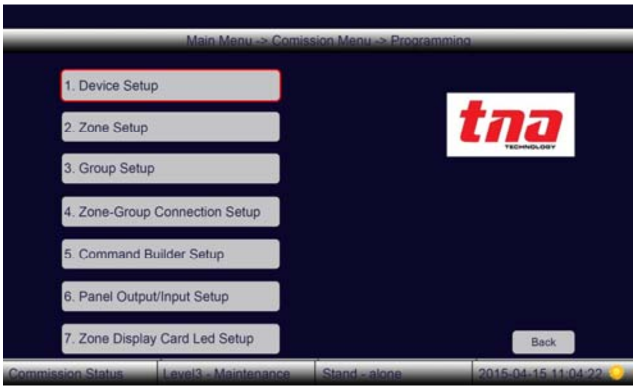
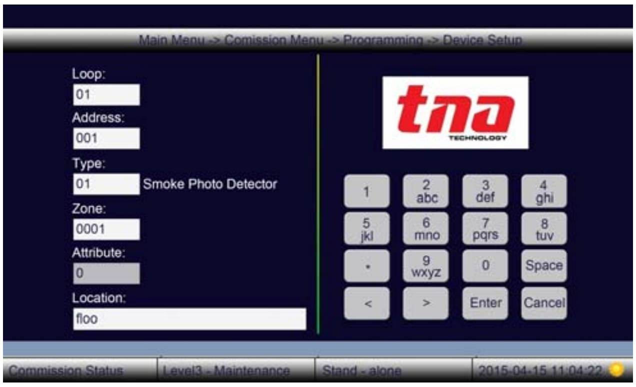

Main Menu -> Comission Menu -> Programming
1. Device Setup
2. Zone Setup
3. Group Setup
4. Zone-Group Connection Setup
5. Command Builder Setup
6. Panel Output/Input Setup
7. Zone Display Card Led Setup
Back
tna TECHNOLOGY
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 66

5.3.2.1 Device Setup

Selecting this feature user allow to program the device parameter by typing onto parameters box.

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **1 Device Setup** and then type the parameters


Main Menu -> Comission Menu -> Programming -> Device Setup

Loop: 01
Address: 001
Type: 01 Smoke Photo Detector
Zone: 0001
Attribute: 0
Location: floo

tna TECHNOLOGY
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
.
9 wxyz
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

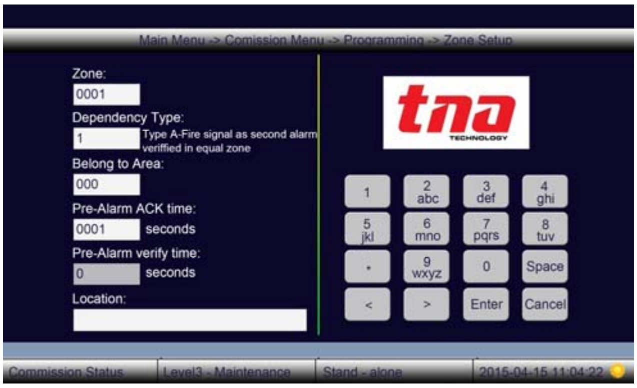
Figure 67

Description:
Loop: Assign the loop number
Address: Assign unique number of device
Type: Assign the device type
Zone*: Assign the zone number
Group*: Assign the group number
Note *: Display either Zone or Group box according to the selected device type
Attribute: Use only for output module.
0 – Normal output
1 – Pulse output
Location: The place description of the device

5.3.2.2 Zone Setup

Selecting this feature user allow to program the zone parameter by typing on the parameter box

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **2 Zone Setup** and then type the parameters



Zone: 0001
Dependency Type: 1 Type A-Fire signal as second alarm verifified in equal zone
Belong to Area: 000
Pre-Alarm ACK time: 0001 seconds
Pre-Alarm verify time: 0 seconds
Location:

Figure 68

Description:

Zone: Assign the zone number

Dependency: This feature complies with Dependency Mode. The signal from an automatic fire detection device selected for Dependency operation shall be acknowledged at the fire alarm control unit by a trained personnel within given time of annunciation in order to initiate the alarm investigation phase. If the signal is not acknowledged within the given time, alarm warning devices signals in accordance with the building evacuation or relocation plan and remote signals shall be automatically immediately activated

0 The system shall response to first alarm from any detector in the zone

1 The system shall response to a second alarm from any detector in the same zone as the system alarm (Type A)

2 The system shall response to a second alarm from any detector in the same or different zone of the same area as the system alarm (Type B)

Note: *The manual call points are excluded in the Dependency mode*

Pre-Alarm Acknowledge Time: From 1 sec to 300 seconds (5 minutes)
Pre-Alarm Verify Time: From 1 sec to 1800 seconds (30 minutes)

During Day Mode

The signal from an automatic fire detection device selected for Dependency operation shall be acknowledged at the fire alarm control unit by a trained personnel within given time of annunciation in order to initiate the alarm investigation phase. If the signal is not acknowledged within the given time, alarm warning devices signals in accordance with the building evacuation or relocation plan and remote signals shall be automatically immediately activated.

If the signal is acknowledged, The Panel will turn to Pre-Alarm Verify Mode. In the Verify time, if the signal is not acknowledged again within the given time, or the signal is acknowledged again, or the dependency condition is met, alarm warning devices signals in accordance with the building evacuation or relocation plan and remote signals shall be automatically immediately activated.

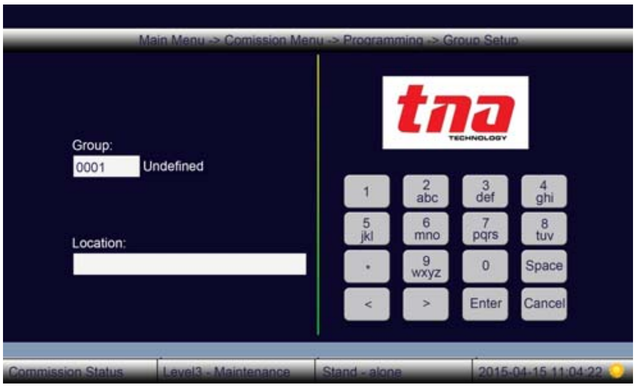
During Night Mode

Because there is no trained personnel to monitor the control panel in the night, the signal from an automatic fire detection device selected for Dependency operation shall make a Pre-Alarm information with a fixed delay time (Type A is 30 minutes and Type B is 5 minutes). Within the delay time, if there is a second alarm that meets the dependency condition, the Pre-Alarm will automatically change to a fire alarm, or the Pre-Alarm will cancelled automatically, the Panel returns to normal state.

5.3.2.3 Group Setup

Selecting this feature allow to program the group location by typing on the group box

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **3 Group Setup** and then type the location.


Main Menu -> Comission Menu -> Programming -> Group Setup
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
.
9 wxyz
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Group: 0001 Undefined

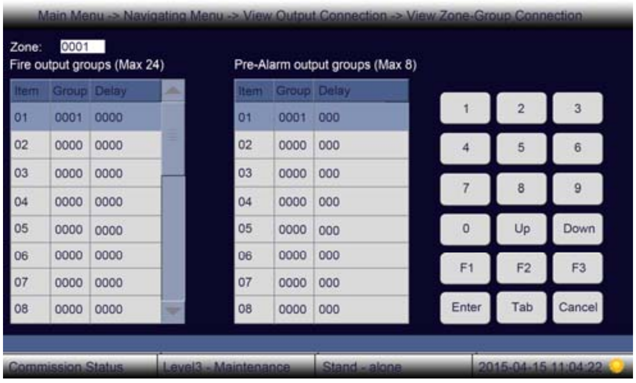
Location:

Figure 69

5.3.2.4 Zone-Group Connection Setup

Selecting this feature user allow to program relationship between the Zone and group.

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **4 Zone-Group Connection Setup** and then type the parameters


Main Menu -> Navigating Menu -> View Output Connection -> View Zone-Group Connection
1
2
3
4
5
6
7
8
9
0
Up
Down
F1
F2
F3
Enter
Tab
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Zone: 0001

Fire output groups (Max 24)

Item	Group	Delay
01	0001	0000
02	0000	0000
03	0000	0000
04	0000	0000
05	0000	0000
06	0000	0000
07	0000	0000
08	0000	0000

Pre-Alarm output groups (Max 8)

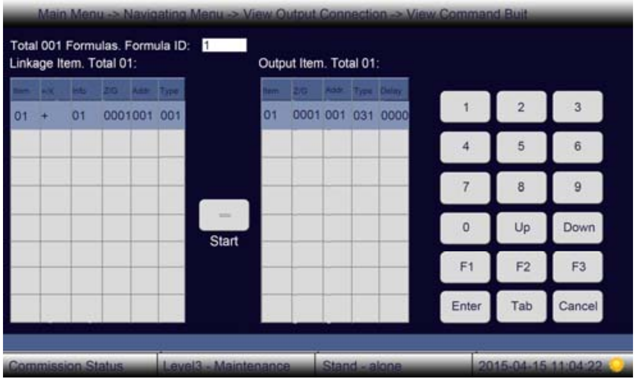
Item	Group	Delay
01	0001	000
02	0000	000
03	0000	000
04	0000	000
05	0000	000
06	0000	000
07	0000	000
08	0000	000

Figure 70

5.3.2.5 Command Builder Setup

Selecting this feature user allow to program set of commands in which any input to activate any output or groups of output, also known as Formula

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **5 Command Builder Setup** and then type the formula.


Main Menu -> Navigating Menu -> View Output Connection -> View Command Buit
Start
1
2
3
4
5
6
7
8
9
0
Up
Down
F1
F2
F3
Enter
Tab
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Total 001 Formulas. Formula ID: 1

Linkage Item. Total 01:

Item	+/X	Info	Z/G	Addr	Type
01	+	01	0001	001	001

Output Item. Total 01:

Item	Z/G	Addr	Type	Delay
01	0001	001	031	0000

Figure 71

Linkage Item Description:

Info: In the info box select the signal information.

1- Fire Information
2- Zone Fire Information
3- Pre-Alarm Information
4- Supervisory Information
5- Fault Information in Zone
6- Fault Information in Group
7- Activation Information
8- Disable Information
9- Zone Disable Indication
10- Group Disable Information
11- Timer Alarm 1
12- Timer Alarm 2
13 - Timer Alarm 3
49- Fire Resume
50- Zone Fire Resume
51- PreAlarm Resume
52- Supervisory Resume
53- Fault Resume in Zone
54- Fault Resume in Group
55- Activation Resume
56- Enable
57- Zone Enable
58- Group Enable

Z/G: Type either the zone or group.
Adder: Type the device address from 1 to 254
Type: Type the device type number

5.3.2.6 Panel Output/Input Setup

Selecting this feature user allows to configure panel output and input.

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **6 Panel Output/Input Setup** and then display sub-menus

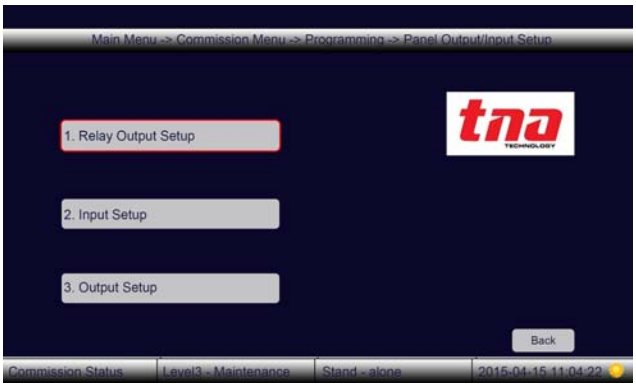
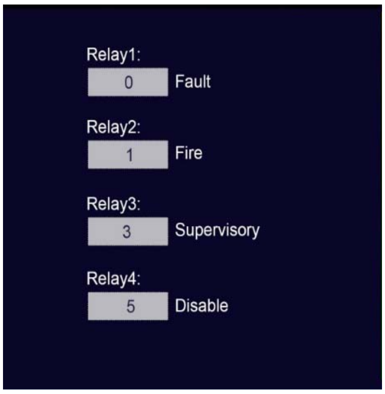
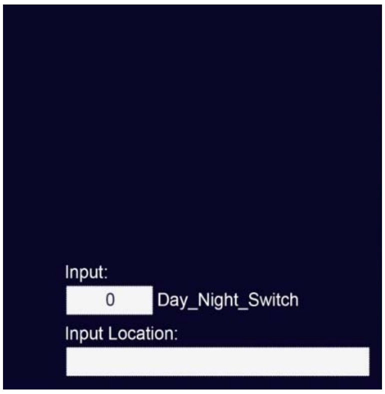

Main Menu -> Commission Menu -> Programming -> Panel Output/Input Setup
1. Relay Output Setup
2. Input Setup
3. Output Setup
tna
TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 72



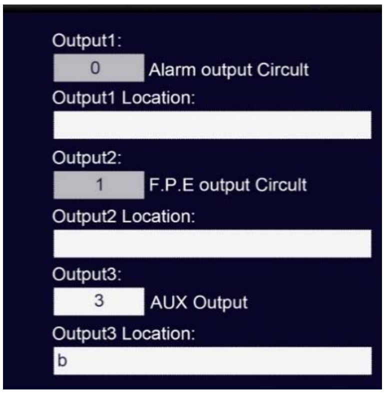
Relay1: 0 Fault
Relay2: 1 Fire
Relay3: 3 Supervisory
Relay4: 5 Disable

Figure 73: 1 Relay Output Setup



Input: 0 Day_Night_Switch
Input Location:

Figure 74: 2 Input Setup



Output1: 0 Alarm output Circuit
Output1 Location:
Output2: 1 F.P.E output Circuit
Output2 Location:
Output3: 3 AUX Output
Output3 Location: b

Figure 75: 3 Output Setup

Relay Selection:

0. – For Fault Signal
1. – For Pre-Fire Signal
2. – For Fire Signal
3. – For Supervisory Signal
4. – For Active Signal
5. – For Disable Signal – For PAS Switch

Input Selection: (For Future Use)

0. – For Day Night Switch
1. – For Acknowledgment Switch
2. – For Silence Switch
3. – For Reset Switch
4. – For Evacuation Switch

Output Description

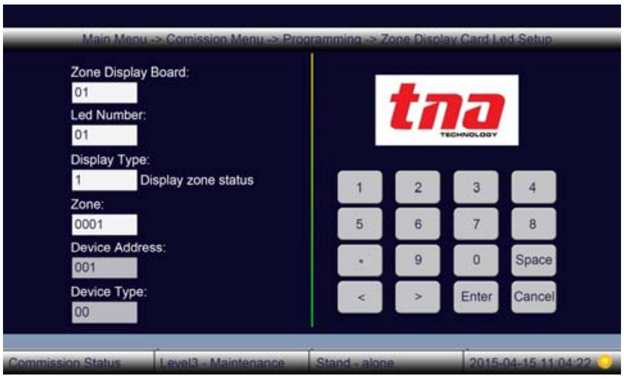
0. – Alarm Output Circuit
1. – F.P.E. Output Circuit
2. – Reserved
3. – Auxiliary Output Circuit
4. – Resettable Aux Circuit

6. – For Test Signal

5.3.2.7 Zone Display Card LED Setup

Selecting this feature user allows to configure zone indicator panel

On the Main Menu tap **3 Commission Menu** then tap **2 Programming** and then tap **7 Zone Display Card LED Setup** and then type the zone LED.


Main Menu -> Comission Menu -> Programming -> Zone Display Card Led Setup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Zone Display Board: 01
Led Number: 01
Display Type: 1 Display zone status
Zone: 0001
Device Address: 001
Device Type: 00

Figure 76

5.3.3 Pass code Setup

Selecting this feature user allows to program the panel access pass code.

On the Main Menu tap **3 Commission Menu** then tap **3 Passcode Setup** and then display the sub-menus

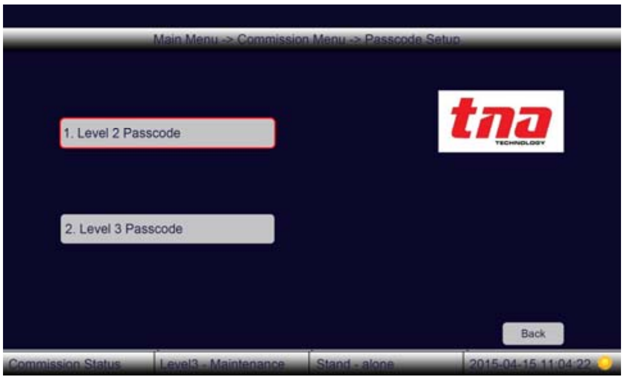

Main Menu -> Commission Menu -> Passcode Setup
1. Level 2 Passcode
2. Level 3 Passcode
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 77

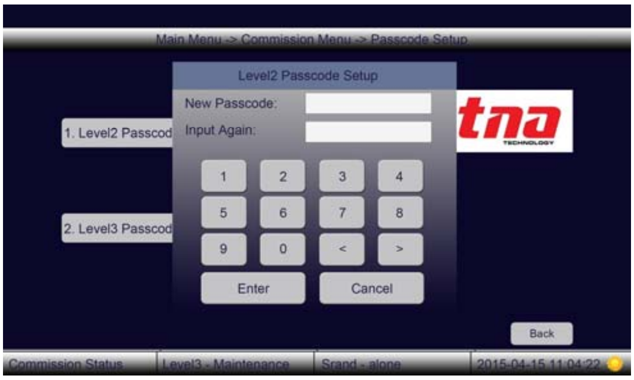

Main Menu -> Commission Menu -> Passcode Setup
Level2 Passcode Setup
New Passcode:
Input Again:
1. Level2 Passcod
2. Level3 Passcod
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 78: Operate Pass code-Level 2

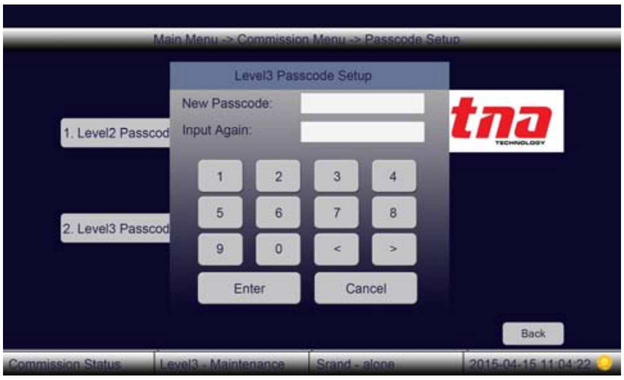
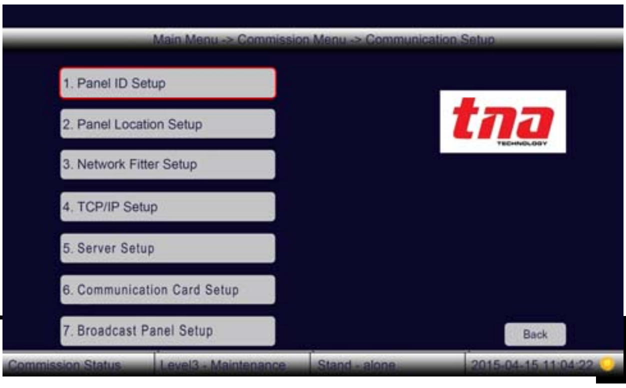

Main Menu -> Commission Menu -> Passcode Setup
Level3 Passcode Setup
New Passcode:
Input Again:
1. Level2 Passcod
2. Level3 Passcod
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 79: Commission Pass code-Level 3

5.3.4 Communication Setup

Selecting this feature user allow to configure the panel to panel communication and panel to other third party system communication. The Communication Setup is divided into seven [7] sub-menus.


Main Menu -> Commission Menu -> Communication Setup
1. Panel ID Setup
2. Panel Location Setup
3. Network Filter Setup
4. TCP/IP Setup
5. Server Setup
6. Communication Card Setup
7. Broadcast Panel Setup
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

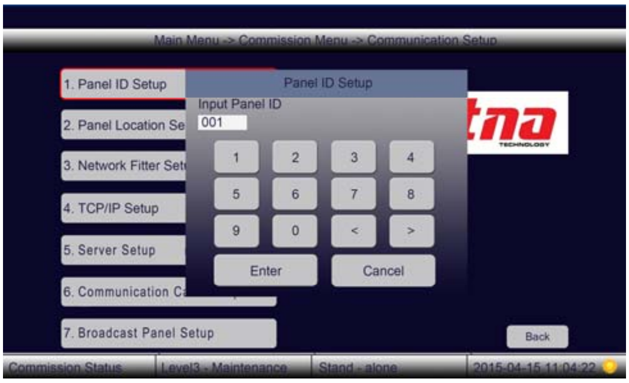
On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then display the sub-menus

Figure 80

5.3.4.1 Panel ID Setup

Selecting this features user allows to configure the local panel ID

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **1 Panel ID Setup** and then type number on the Input Panel ID box.


Main Menu -> Commission Menu -> Communication Setup
1. Panel ID Setup
2. Panel Location Se
3. Network Fitter Set
4. TCP/IP Setup
5. Server Setup
6. Communication C
7. Broadcast Panel Setup
Panel ID Setup
1
2
3
4
5
6
7
8
9
0
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

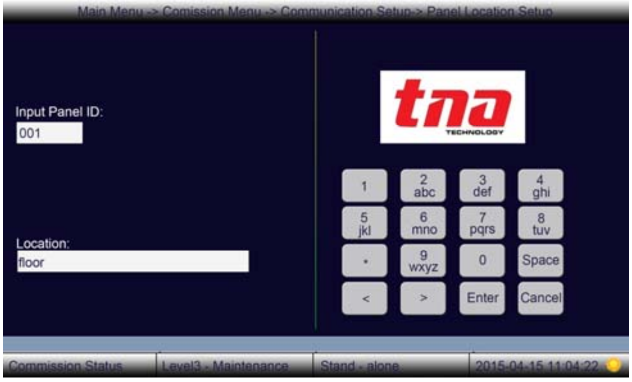
Input Panel ID
001

Figure 81

5.3.4.2 Panel Location Setup

Selecting this feature user allows to configure the local panel description

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **2 Panel Location Setup** and then type ID number and Location on the box.


Main Menu -> Comission Menu -> Communication Setup-> Panel Location Setup
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
.
9 wxyz
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Input Panel ID:
001

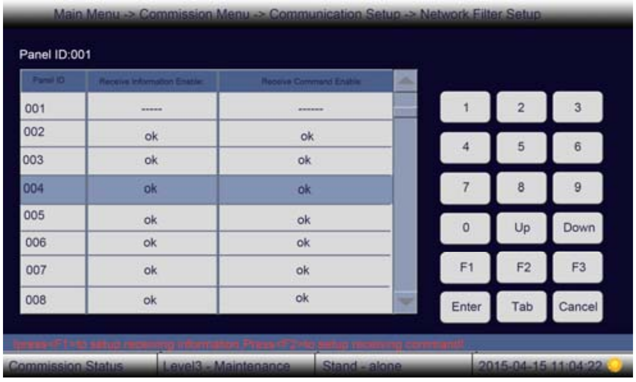
Location:
floor

Figure 82

5.3.4.3 Network Filter Setup

Selecting this feature user allows to configure the local panel to set as a master or slave panel.

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **3 Network Filter Setup** and then choose whether to receive the network panel' information or command on the box.


Main Menu -> Commission Menu -> Communication Setup -> Network Filter Setup
1
2
3
4
5
6
7
8
9
0
Up
Down
F1
F2
F3
Enter
Tab
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Panel ID:001

Panel ID	Receive Information Enable	Receive Command Enable
001	-----	------
002	ok	ok
003	ok	ok
004	ok	ok
005	ok	ok
006	ok	ok
007	ok	ok
008	ok	ok

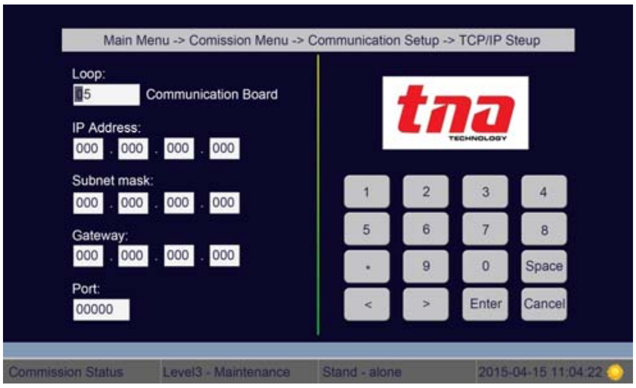
press<F1>to setup receiving information Press<F2>to setup receiving command!!

Figure 83

5.3.4.4 TCP/IP Setup

Selecting this feature user allows to set the local panel TCP/IP configuration. This is for future use.

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **4 TCP/IP Setup** and then type the configuration on the box.


Main Menu -> Comission Menu -> Communication Setup -> TCP/IP Steup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

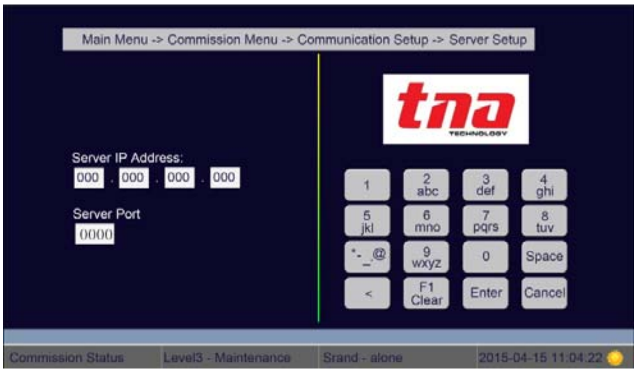
Loop: 5 Communication Board
IP Address: 000 . 000 . 000 . 000
Subnet mask: 000 . 000 . 000 . 000
Gateway: 000 . 000 . 000 . 000
Port: 00000

Figure 84

5.3.4.5 Server Setup

Selecting this feature user allows to set the server configuration.

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **5 Server Configuration** and then type the configuration on the box.


Main Menu -> Commission Menu -> Communication Setup -> Server Setup
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
*-_@
9 wxyz
0
Space
<
F1 Clear
Enter
Cancel
Commission Status
Level3 - Maintenance
Strand - alone
2015-04-15 11:04:22

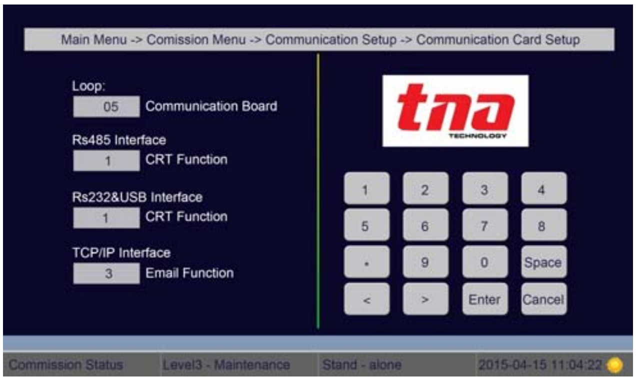
Server IP Address: 000 . 000 . 000 . 000
Server Port: 0000

Figure 85

5.3.4.6 Communication Card Setup

Selecting this feature user allows to set the local panel card configuration. This is for future use.

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **6 Communication Card Setup** and then type the configuration on the box.


Main Menu -> Comission Menu -> Communication Setup -> Communication Card Setup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

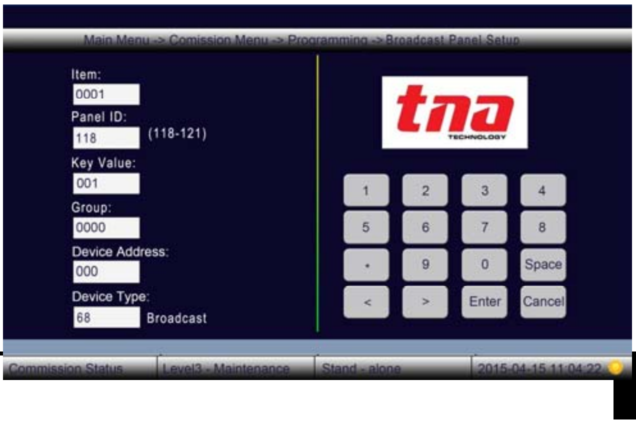
Loop: 05 Communication Board
Rs485 Interface: 1 CRT Function
Rs232&USB Interface: 1 CRT Function
TCP/IP Interface: 3 Email Function

Figure 86

5.3.4.7 Broadcast Panel Setup

Selecting this feature user allows to configure the broadcast panel.

On the Main Menu tap **3 Commission Menu** then tap **4 Communication Setup** and then tap **7 Broadcast Panel Setup** and then type the configuration on the box.


Main Menu -> Comission Menu -> Programming -> Broadcast Panel Setup
1
2
3
4
5
6
7
8
.
9
0
Space
<
>
Enter
Cancel
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Item: 0001
Panel ID: 118 (118-121)
Key Value: 001
Group: 0000
Device Address: 000
Device Type: 68 Broadcast

Figure 87

5.3.5 Project Name

Selecting this feature user allows to set the name or description of the local panel up to 40 characters which will display on the corner screen.

On the Main Menu tap **3 Commission Menu** then tap **5 Project Name Setup** and then type the name on the project name box.

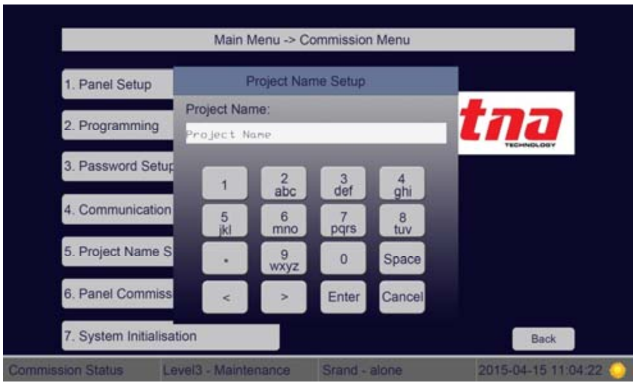

Main Menu -> Commission Menu
1. Panel Setup
2. Programming
3. Password Setup
4. Communication
5. Project Name S
6. Panel Commiss
7. System Initialisation
Project Name Setup
Project Name:
Project Name
1
2 abc
3 def
4 ghi
5 jkl
6 mno
7 pqrs
8 tuv
.
9 wxyz
0
Space
<
>
Enter
Cancel
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Figure 88

5.3.6 Panel Commission

Selecting this function user allows to enroll all the addressable devices connected in the loop to the control panel.

On the Main Menu tap **3 Commission Menu** then tap **6 Panel Commission and** then display the sub-menus

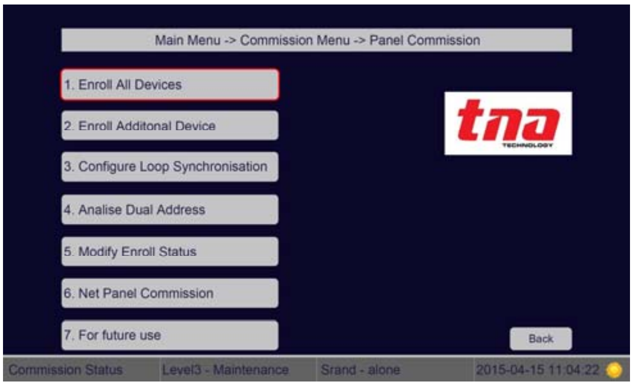

Main Menu -> Commission Menu -> Panel Commission
1. Enroll All Devices
2. Enroll Additonal Device
3. Configure Loop Synchronisation
4. Analise Dual Address
5. Modify Enroll Status
6. Net Panel Commission
7. For future use
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Figure 89

Panel Commission Menu:

1 Enroll All Devices	When selected, the control panel will enroll all the addressable devices connected in each loop.
2 Enroll Additional Devices	When selected, the control panel will enroll the new added addressable device(s) connected in each loop.
3 Configure Loop Synchronisation	When the panel have Synchronisation fault, we shall select it to synchronic the loop card' data with the panel. Normally we use this function when we change the loop card.
4 Analyses Dual Address	When selected, the panel will read and analyze all the devices address. When the system found duplicated address it will display the loop and the device number.

5 Modify Enroll Status	When selected, the panel will allow to modify the previous device configuration

5.3.6.1 Net Panel Commission

Selecting this function user allows to enroll all a local panel to the network connected in the loop to the control panel.

On the Main Menu tap **3 Commission Menu** then tap **6 Net Panel Commission and** then display the sub-menus

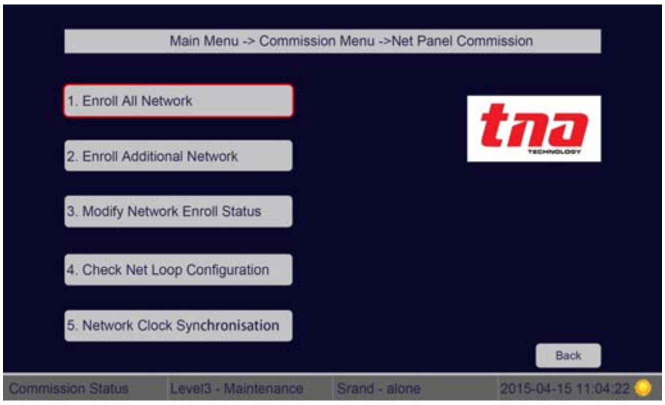

Main Menu -> Commission Menu ->Net Panel Commission
1. Enroll All Network
2. Enroll Additional Network
3. Modify Network Enroll Status
4. Check Net Loop Configuration
5. Network Clock Synchronisation
tna
TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Srand - alone
2015-04-15 11:04:22

Figure 90

Network Panel Commission Menu:

1 Enroll All Network	When selected, the control panel will enroll all the control panels connected in the network.
2 Enroll Additional Network	When selected, the control panel will enroll new added additional panel into the existing network.
3 Modify Network Enroll Status	When selected, the panel will allow modifying the panel status in the existing network.
4 Check Net Loop Configuration	When selected, the panel will check the memory map which is distributed to store the loop devices' configuration of the panels in the network. A panel supports storing 500 loops' device configuration of the network panel.
5 Network Clock Synchronisation	When selected, the internal clock timer will synchronize to all the panels in the network,

5.3.7 System Initialisation

Selecting this function user allows to initialise or reset the control panel.

On the Main Menu tap **3 Commission Menu** then tap **7 System Initialisation** then display the sub-menus

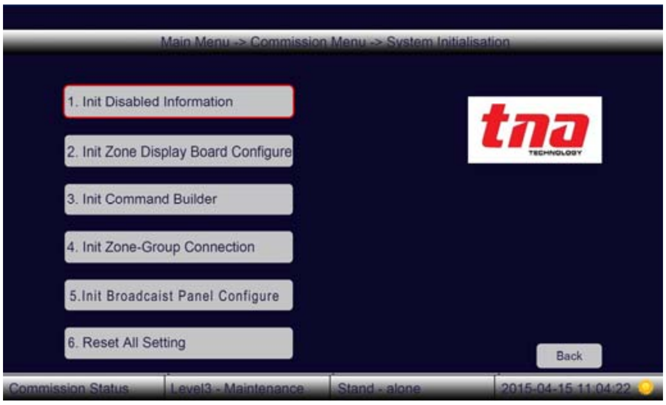

Main Menu -> Commission Menu -> System Initialisation
1. Init Disabled Information
2. Init Zone Display Board Configure
3. Init Command Builder
4. Init Zone-Group Connection
5.Init Broadcaist Panel Configure
6. Reset All Setting
tna
TECHNOLOGY
Back
Commission Status
Level3 - Maintenance
Stand - alone
2015-04-15 11:04:22

Figure 91

System Initialisation Menu:

1 Init Disable Information	When selected, the control panel will initialise and delete all disable status and then resume the operation.
2 Init Zone Display Card Configure	When selected, the control panel will initialise and delete all zone display information.
3 Init Command Builder	When selected, the control panel will initialise and delete all the formulas configured on Command Builder.
4 Init Zone-Group Connection	When selected, the control panel will initialise and delete all the formulas configured on Zone-Group Connection
5 Init Broadcast Panel Configure	When selected, the control panel will initialise and delete all Broadcast Panel Configure information.
6 Reset All Setting	When selected, the control panel will reset and then all the system programming information will be lost(need level 4 passcode).

6 Maintenance

6.1 Maintenance Schedule

The User should be regularly tested and serviced the system. The BS5839-P1 makes the following recommendations.

Daily Check

1. Check that the panel indicates normal operation. If not record any fault indicated in the history log and report to the responsible person.
2. Check that any fault recorded from the previous day has received attention.

Monthly Check

1. Operate at least one manual call point or detector [different device each month] to ensure the system operates properly.
2. Check the alarm warning devices have operated and then reset the panel.
3. Any defect should be reported and recorded in the log book.
4. Action should be taken to correct the defect.

Quarterly Check

1. Check entries in the log book and take any necessary action.
2. Inspect the batteries and their connections.
3. Operate at least one manual call point or detector [different device each zone] to ensure the system operates properly.
4. Check all the alarm warning devices have operated and then reset the panel.
5. Check that all function of the control panel operates by simulating fault conditions.
6. Visually check that structure alternation against any corrosion due to environmental effect.
7. Any defect should be reported and recorded in the log book. Action should be taken to correct the defect.

Annually Check

1. Carry out an inspection as detail for this quarterly inspection.
2. Every detector should be tested in the site.

3. All cable fittings and equipment should be checked to ensure that they are secure and undamaged.

6.2 Trouble Shooting

What you notice	What it means	What to do
No indication on the panel or abnormal indication	Power is abnormal Loose connection with switchboard.	Check and replace low-voltage switch power. Check the connection to display board.
Display "AC Fault" after power-up	No AC power	Check and connect AC wire.
Display "Battery Fault" after power-up	Loose connection with battery. Battery discharged or damaged.	Open the power box and check relative parts. Power up for more than eight hours with the AC power supply, if the fault still exists, replace the batteries.
Unable to register loop equipment	Bus wrong or loose connection	Check the loop
Unable to register repeater panels	Wrong or loose connection of communication cables	Check power supply to repeaters and communication wires
Cannot print	Print mode is disabled. Loose connection with printer. Printer damaged	Enable the print mode. Check and connect the printer well. Replace the printer.
Equipment fault	Equipment disconnected. Equipment damaged.	Check connection Replace equipment
Loop fault	Loop is shorted Loop is Interruption (The devices are re-established within 100s)	Check the loop and repair.
Clock or memory fault.	External interference. Corresponding parts are aging.	Check if the FACP is properly earthed. Inform our technical service

7 Battery Capacity

The standby battery is not supplied with the panel. It is recommending use two new rechargeable and sealed lead acid type batteries with capacity and sized according to the authority having jurisdiction.

Use a battery of an appropriate capacity to ensure the system is running in the event of failure of the main power source.

The user should calculate the capacity of the battery according to the panel current consumption before connecting to the panel. The Equation for calculating the battery capacity is listed below:

Battery capacity（**Ah**）**$=I_{Qmax}\times T_1+(I_{Qmin}+I_{Lmax}+I_{Fout})\times T_2$**
In which:

I_{Qmax}＝1.41A, which is the quiescent current when the FACP is full-loaded;

I_{Qmin}=0.45A, is the quiescent current when the FACP is with no load;
I_{Lmax} =0.96A, is the maximum loop current;
I_{Fout}=0.5A+0.5A+0.5A=1.5A, which is the alarm output current (The FACP provides 3 fire alarm outputs; output current of each is 0.5A, 0.5A and 0.5A respectively).
T_1 is the monitoring time when the FACP is full-loaded, which shall be at least 24 hours according to EN 54-4.
T_2 is the alarm time which shall be at least 30 minutes according to EN 54-4.
From the above equation, we can get the battery capacity is 35.30Ah, so that a 45Ah battery is recommended.

8 Returns and Warranty Policy

Warranty Policy

TANDA Dev products are warranted to be free from defects in materials and workmanship for one [1] form the date of purchase from an authorized distributor or agent or two [2] years from the date of manufactured. Within this period, we will at our sole discretion, repair or replace any components that fail in normal use. Such repairs or replacement will be made at free of charge for parts and/or labor provided that you shall be responsible for any transportation charges. Replacement product may be new or refurbished at our discretion.

This warranty does not apply to consumable parts; damage cause by accident, abuse, misuse, flood, fire or other act of nature or external causes; damage caused by service performance by anyone who is not authorize agent or trained personnel; damage to a product that has been modified or altered without the prior written permission of TANDA Dev.

Return

Please contact our Customer Service prior to returning any product to receive a return authorization form and RMA number. You will be responsible for, and pre-pay, all return shipping charges and shall assume all risk of loss or damage to product while in transit to us. We recommend that you use a traceable method of shipping for your protection. We will pay for shipping to return any product to you.

Once you have obtained the RMA number, please send to us the purchased TNA product with the RMA number clearly marked on the outside of the package and on the shipping slip if you choose to use traceable carrier. Return shipping instruction and returns address will be included in your RMA documents.

9 Appendix 1

9.1 EN54 Part 2 /4 Compliance

TX7008R Intelligent Fire Alarm Control Panel (FACP) complies with the requirements of EN54-2 1997 + A1: 2006 and EN 54-4 1997 + A1: 2002 + A2: 2006. In addition to the basic requirements of these standards, the panel conforms to the following optional requirements.

Option		**EN 54-2 Clause**
Indication	Alarm counter	7.13
	Delays to Output	7.11
	Dependencies on more than one alarm signal	7.12
	Disablement of addressable points	9.5
Outputs	Output to fire alarm devices	7.8
	Output to fire protection equipment	7.10
Test	Test condition	10

The power supply of TX7008R FACP complies with EN 54-4 requirements.

	EN 54-4 Clause
Power supply from the main power source	5.1
Power supply from the standby power source (battery)	5.2
Charger	5.3
Faults	5.4

In addition to functions required by EN54-2, the panel supports a number of ancillary functions that are not required. These are outlined below:

Ancillary Function	**Manual Section**
Printer	3.2.1
TX7008R Communication Card	2.3
TX7810 Defining Tool	3.4

9.2 Index of Information Required

EN54-2 Clause 12.2		**Chapters or sections in this manual**
12.2.1.a	General description of the equipment	Chapter 1
	Optional functions with requirements of EN54-2, functions relating to EN54-4, ancillary functions not required by EN54-2	Section 9.1
12.2.1.b	Power requirement for recommended operation	Section 2.4.1
	Maximum capacity per detection circuit	Section 1.2
	Maximum capacity per FACP	Chapter 1
	Electrical ratings for inputs and outputs	Section 2.4.2
	Communication parameters on transmission paths	Section 2.4.3
	Fuse ratings	Section 2.4.1
12.2.1.c	Installation information	Chapter 2
12.2.1.d	Configuring and commissioning instructions	Section 5.3
12.2.1.e	Operating instructions	Section 5.1,5.2
12.2.1.f	Maintenance information	Chapter 6