TX7330

LCD Repeater Panel
Installation and Operation Manual

Product Safety

To prevent severe injury and loss of life or property, read the instruction carefully before installing the LCD Repeater 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

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1 Introduction

1.1 Overview

TX7330 LCD Repeater Panel is designed with built-in MCU processor to display exact fire event messages from the control panel and fast relay response with simultaneous audible and visual signal output. This repeater panel can also program to limit the zone display from All Zones into a particular zone or three adjacent zones through the panel key buttons. The unit is connected through the communication loop of TX7004 Intelligent control panel along with the devices and can install up to 254 units per loop. The repeater panel can be used whenever there is a need to relay information to multipoint informing key personnel.

The unit is manufactured base on the requirement of EN 54 part 2, European Standard. The unit is compact size and aesthetically pleasing with unobtrusive design that will complement modern building designs and its plug-in type assembles make installation and maintenance more convenient to the installer. The unit is compatible to the TX7004 Analogue Intelligent Fire Alarm Control Panel, produced by single manufacture T&A, to avoid addressable communication compatibility problem.

1.2 Feature and Benefits

- EN54-2 Compliance
- Fire display passive repeater panel
- Built-in MCU processor and digital addressing
- Fast response of audible and visible signal from the panel
- Direct access common keys such as MUTE, UP, DOWN and BROWSE.
- Programmable Zone Display such as All Zone, Single Zone and Three Adjacent Zone
- LED status indicator
- Onsite Adjustable Parameter
- Loop sited wiring with external 24V supply
- Compact size and aesthetically pleasing design
- Surface mounting with fix base for simple installation

1.3 Technical Specification

• Listed	LPCB Pending
• Compliance	EN 54-2: 1997+A1: 2006
• Input Voltage	Loop Power: 24VDC [16V to 28V] External PSU: 24VDC [20 to 28V]
• Current Consumption	Loop: Standby: 1mA, Alarm: 1.2mA External PSU: Standby: 25mA, Alarm: 80mA
• Memory Capacity	Up to 200 fire event history
• Number per loop	Up to 254 units (ideal)
• Material / Colour	ABS / White Glossy finishing
• Dimension / LWH	180mm x 110 mm x44 mm
• Weight	300g (with Base), 256g (without Base)
• Operating Temperature	0°C to +40°C
• Humidity	0 to 95% Relative Humidity, Non condensing

2 Installation

2.1 Installation Preparation

This LCD Repeater 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.

2.2 Installation and Wiring

1. Mount the LCD Repeater Panel base on standard Figure two [1] to five [2] gang electrical back box. Follow the arrow mark for the correct position. Do not over-tighten the screws otherwise the base will twist. Use two M4 standard screws.
2. Connect the wire in terminal according to the requirement as shown in Figure [3]. Verify the device address and other parameters then stick on the label before attaching the LCD Repeater Panel. The sticker labels are available on the control panel. Align the interface module and tabs and gently pushing the device until it locks into place.

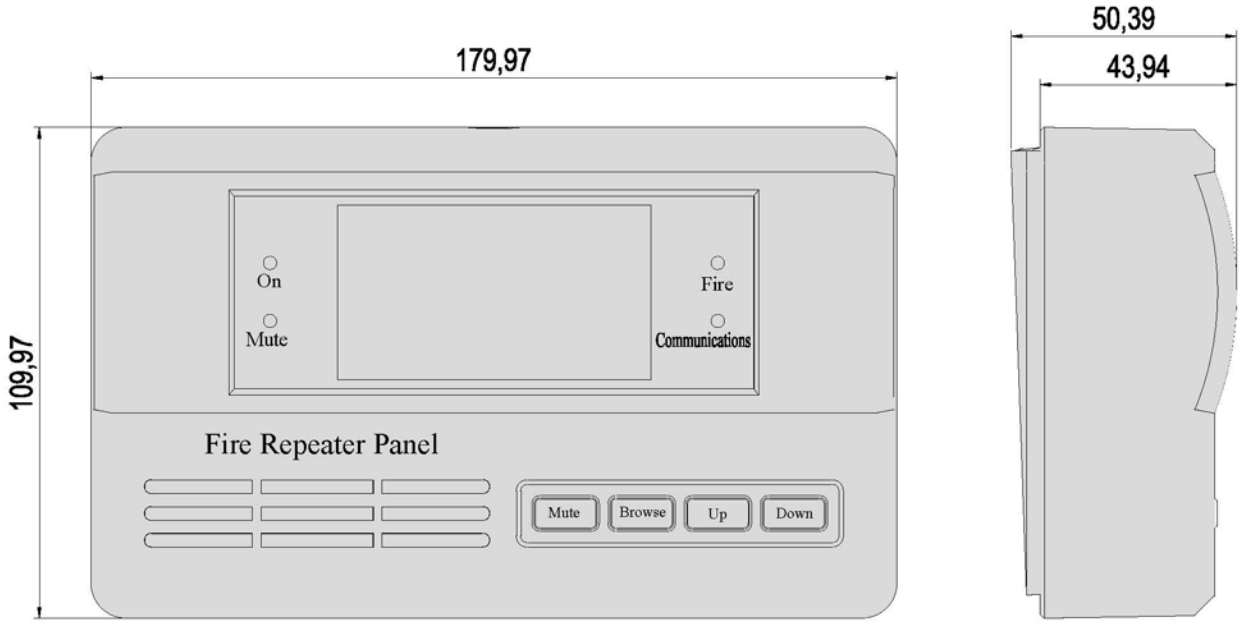


Figure 1: LCD Repeater Panel Structure

Figure 2

Terminal Description

Z1 Signal In (+)
Z1 Signal Out (+)
Z2 Signal In (-)
Z2 Signal Out (-)
D1 External Power Supply In (+)
D2 External Power Supply In (-)
D1 External Power Supply Out (+)
D2 External Power Supply Out (-)

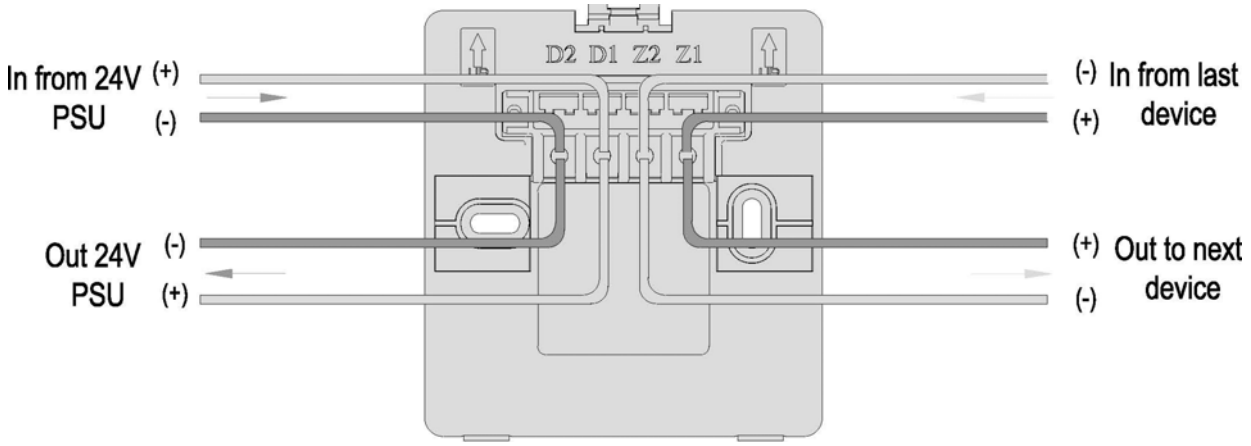


Figure 3: Wiring Details

3 LCD Repeater Panel Configuration

3.1 Preparation

The TX7930 handheld programmer is used to configure LCD Repeater Panel soft address. This tool is not included, must be purchased separately. The programmer is packed with twin 1.5V AA battery and cable, ready for usage once received.

It is mandatory for the commissioning personnel to have programmer tool in order to adjust the LCD Repeater Panel conferring to the site situation and environmental requirements.

Program a unique address number for each device according to the project layout before placing from the Terminal Base.

Warning: *Disconnect the loop connection whilst connecting to the handheld programmer.*

3.2 Repeater Addressing

1. Connect the programming cable to Z1 and Z2 terminals (Figure 4). Press **"Power"** to switch on the unit.
2. Switch-on the programmer, then press button **"Write"** or number **"2"** to enter Write Address mode (Figure 5).
3. Input the desire device address value from 1 to 254, and then press **"Write"** to save the new address (Figure 6).

   Note: If display **"Success",** means the entered address is confirmed. If display **"Fail",** means failure to program the address (Figure 7).

4. Press **"Exit"** key to go back Main Menu. Press **"Power"** key to switch-off the programmer.

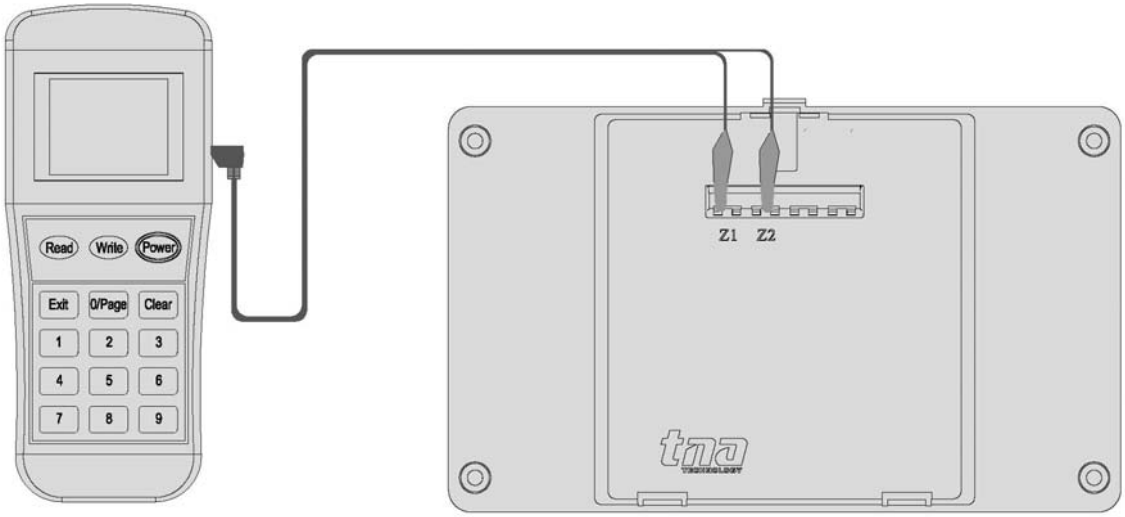


Figure 4: Programmer Connection Detail

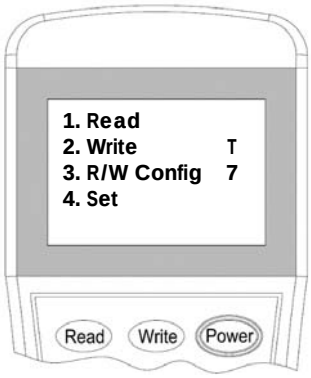


Figure 5

Figure 6

Figure 7

3.3 Panel Operations

3.3.1 LED Indicators

Aside from the LCD display, the TX7330 LED indicator indicate the working status of the unit as refers to the below table.

LED Indicator	Colour	Description
On	Green	When illuminated it indicates the power supply is present
Fire	Red	When illuminated it indicates that a FIRE has been detected in the protected location
Mute	Green	When illuminated it indicates that the MUte button has been pressed
Communication	Green	When illuminated it indicates that the repeater panel is online communication with the control panel

3.3.2 Description of Keys

All of the repeater panel keys are dual functions, this section will guide you to understand the working mode in order the key to work in proper function.

MUTE: This button mutes the buzzer of the repeater panel. Pressing the mute button will stop the internal panel buzzer. (Operation Mode)

MUTE as ***Escape*** function is available during the commissioning mode of the repeater. Pressing this button return the menu and allow user to exit the commission mode. (Commission Mode)

BROWSE: This allows easy single activation of viewing fire alarm events especially during multiple fire alarm events by pressing ***Up (▲)*** and ***Down (▼)*** button. (Operation Mode)

Browse as **Enter** function is available during the commissioning mode of the repeater. Pressing this button will confirm operation and saving setting. (Commission Mode)

Up (▲) and ***Down (▼)***: This button is for the position indicator on the display screen where a user can enter inputs. (Operation Mode)

Up (▲) and ***Down (▼)***: Access to the menu setting. To enter the menu, steady hold both ***Up (▲)*** and ***Down (▼)*** for four (4) seconds then the screen displays the menu. (Commission Mode)

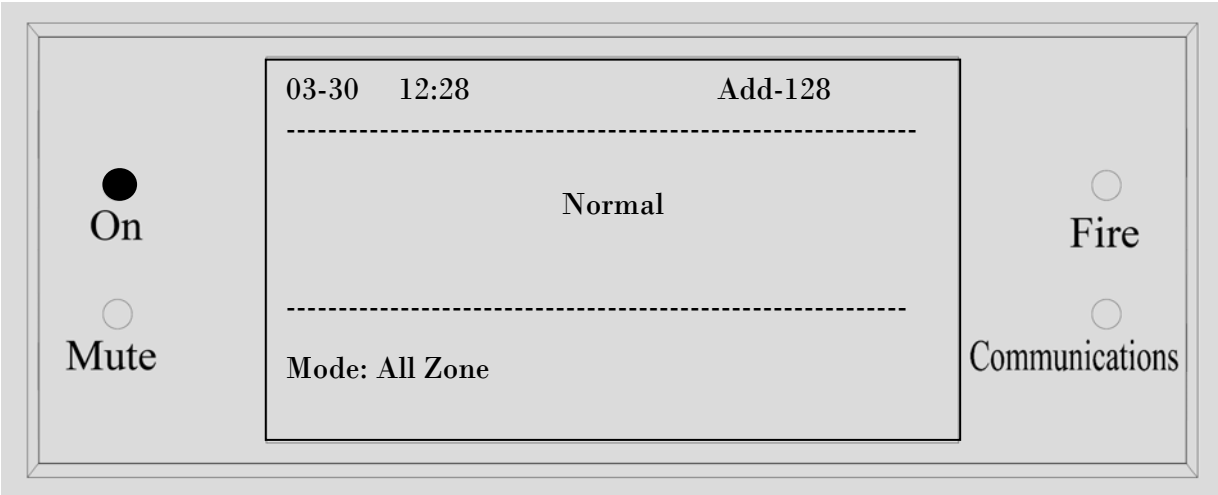


Figure 8: Normal Display Status

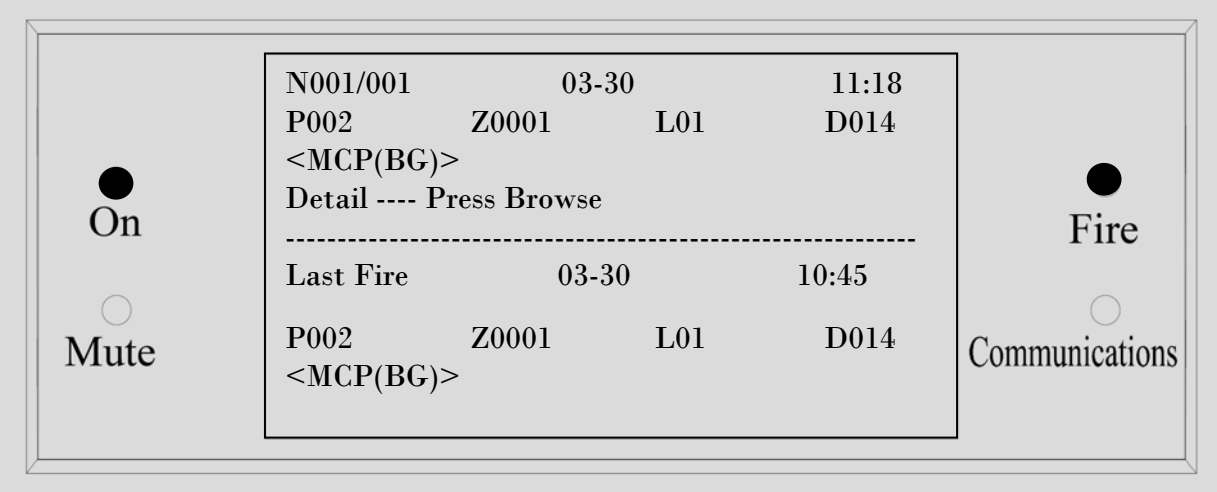


Figure 9: Fire Display Status

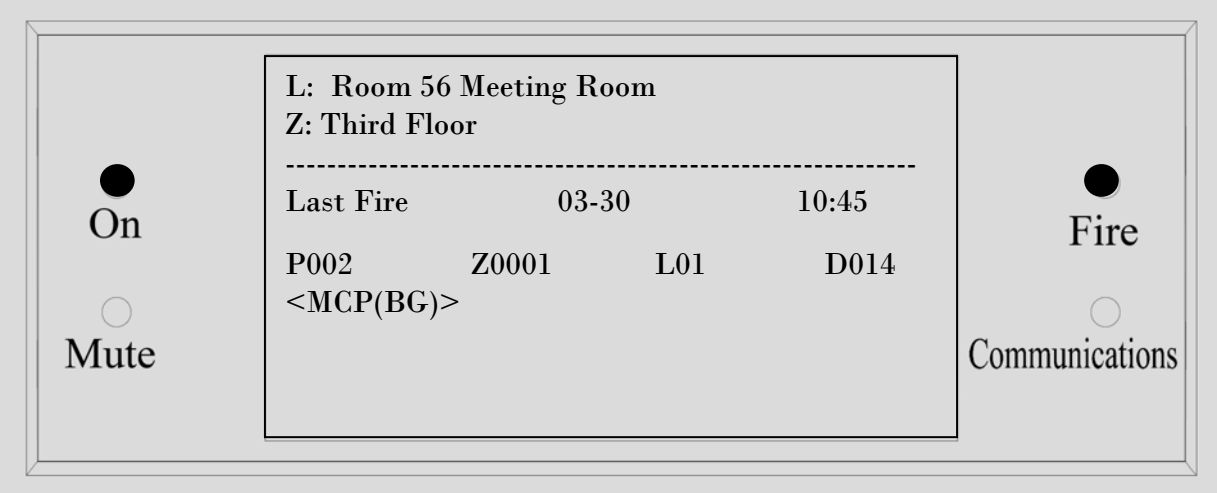


Figure 10: Display When Browse Pressed

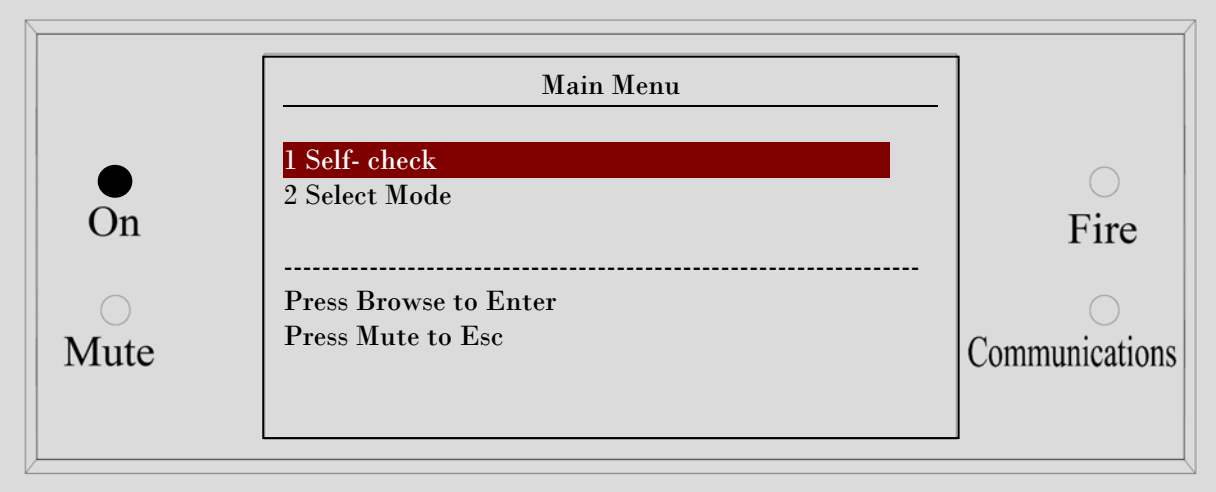
3.3.3 Commissioning Procedures

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

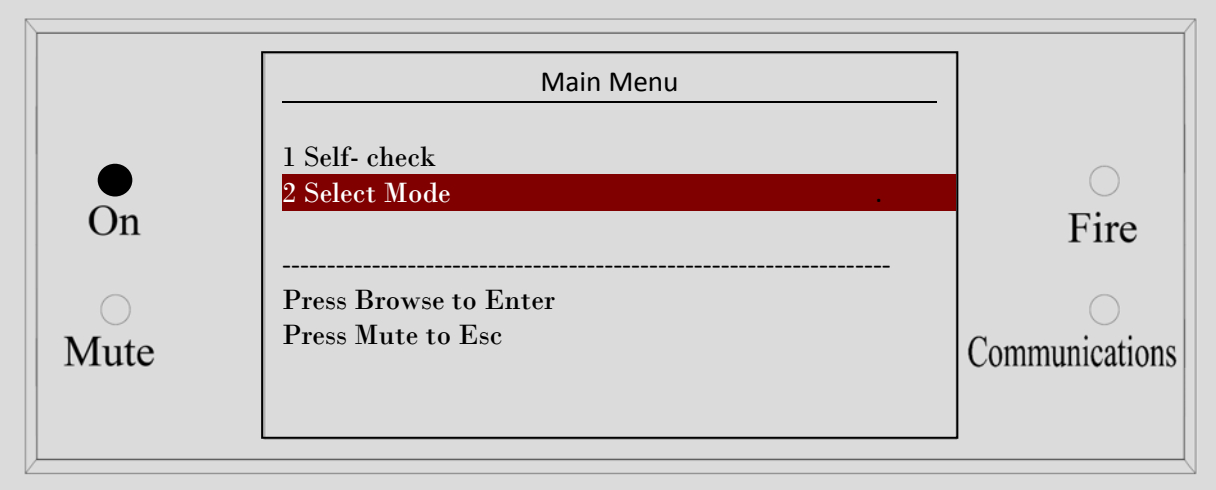
3.3.3.1 To Enter to Commissioning Mode

1. **Main Menu:** Once supplied by 24Vdc the panel turn-on to show the normal display.
   To access to the menu setting, press and hold both *Up (▲)* and *Down (▼)* buttons for four (4) seconds then the screen displays the main menu.

2. **Self-check**: when selected the user allows to test the repeater condition, the units will perform the auto self-check. The unit will simultaneously alarm the buzzer, the turn-on all the LED and reset the LCD display.
   On the main menu, press *Up (▲)* or *down (▼)* buttons to select 1.Self-Check and then press the **Browse** button to Enter.



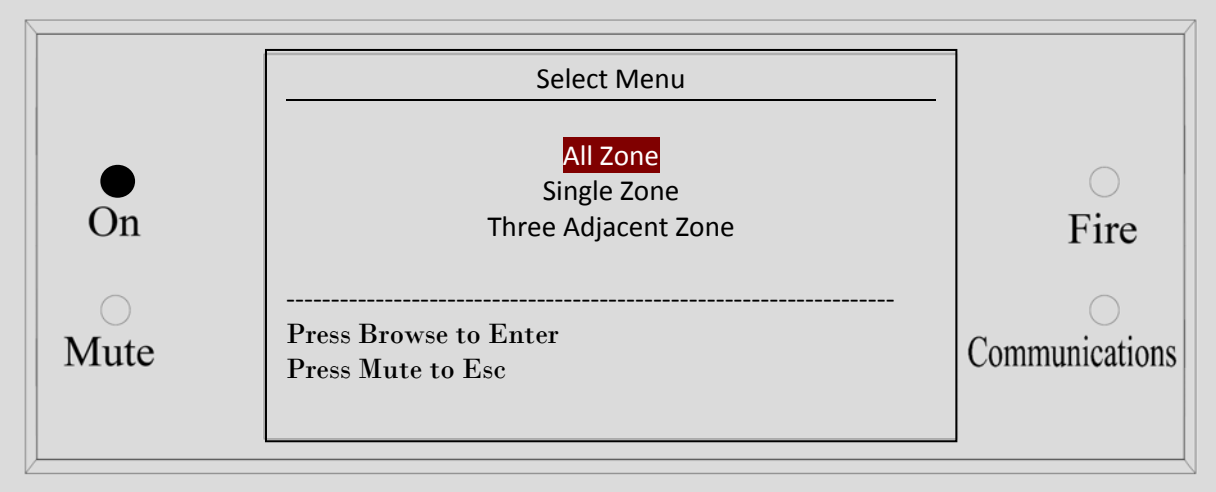
3. **Select Mode**: when selected the user allows to select the zone or zones to display. The units have 3 types of zone display as shown below:



1. **All Zone** : Selecting this option user allows to set the repeater panel to display FIRE events in all the zones. This is the default setting of the repeater panel.

To set All Zone:

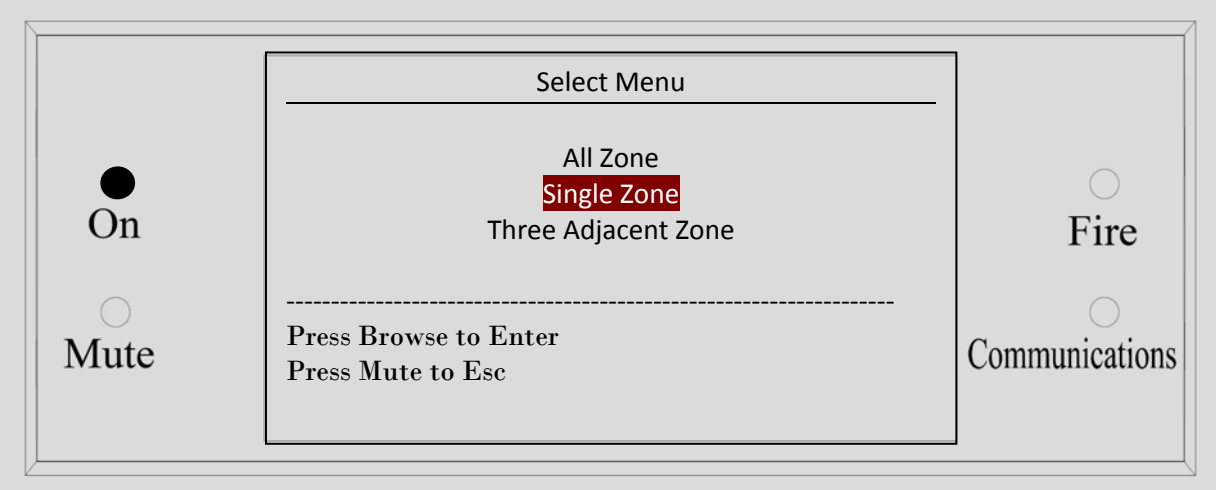
1. On the main menu, press *Up (▲)* or d*own (▼)* buttons to select All Zone and then press the **Browse** button to Enter, then **SUCCESS** message shown indicates program is confirmed.
2. To exist in the commissioning mode, press the MUTE button repeatedly or wait for 50 seconds.

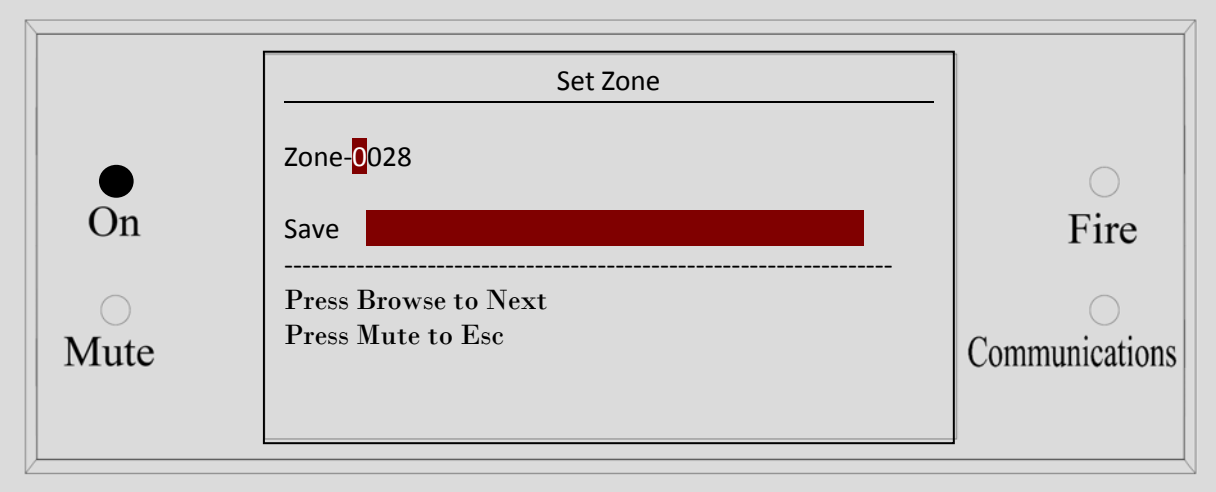


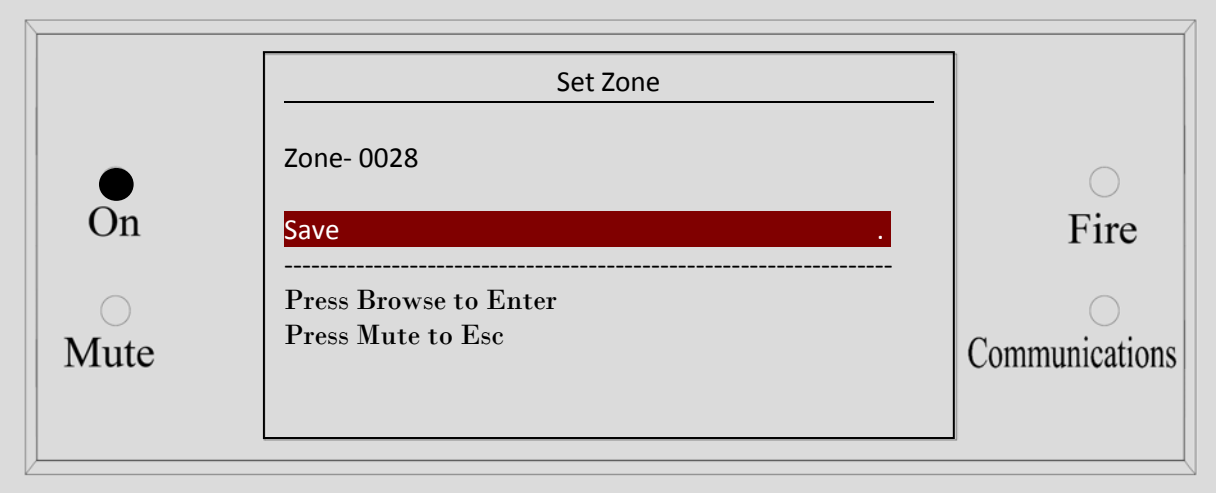
2. **Single Zone** : Selecting this option user all to set the repeater panel to display FIRE events in a particular zone only.

To set a Single Zone:

1. On the main menu, press *Up (▲)* or d*own (▼)* buttons to select Single Zone and then press the **Browse** button to Enter.
2. Enter the zone number by using Browse and press *Up (▲)* or d*own (▼)* buttons.
3. Once the zone is confirmed press the MUTE button, and then press d*own (▼)* button to move cursor to **SAVE** and then press BROWSE. then **SUCCESS** message shown indicates program is confirmed.
4. To exist in the commissioning mode press the MUTE button repeatedly.





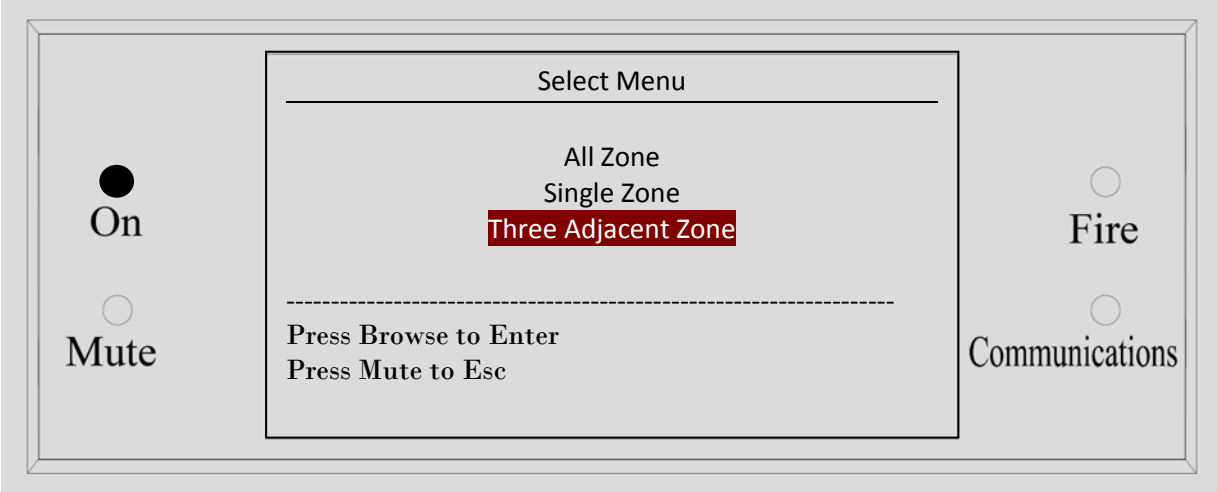


3. **Three Adjacent Zone** : In connection with the single zone, selecting this option user allows to set the repeater panel force to display additional zone above and the zone below of the selected single zone mode.

To set adjacent zone:

1. On the main menu, press d*own (▼)* buttons to select Single Zone and then press the **Browse** button to Enter.
2. Enter the zone number by using Browse and press *Up (▲)* or d*own (▼)* buttons.
3. Once the zone is confirmed press the MUTE button, and then press d*own (▼)* button to move cursor to **SAVE** and then press BROWSE. then **SUCCESS** message shown indicates program is confirmed, then press MUTE button
4. Then press d*own (▼)* buttons to select Three Adjacent Zone and then press BROWSE, then **SUCCESS** message shown indicates program is confirmed
5. To exist in the commissioning mode, press the MUTE button repeatedly.

For Example:
If Zone 28 is selected, the three adjacent zones will be Zone 27, Zone 28 and Zone 29 is permitted to display in the particular repeater panel.



4 General Maintenance

1. Inform the suitable personnel before conducting the maintenance.
2. Disable the LCD repeater Panel on the control panel to prevent false alarm.
3. Do not attempt to repair the circuitry of the LCD repeater Panel, it may affect the operation to respond to a fire condition and will void the manufacturer's warranty.
4. Notify again proper personnel after conducting the maintenance and make sure to enable the LCD repeater Panel and confirm if up and running.
5. Perform the maintenance on semi-annually or depending on the site conditions.

5 Troubleshooting Guide

What you notice	What it means	What to do
Address not enrolling	The wiring is loose The address is duplicate	Conduct maintenance Re-Commission the device
Unable to commission	The damage the electronic circuit	Replace the device

Appendix 1

Limitation of Interface Module

The LCD repeater Panel cannot last forever. In order to keep the LCD repeater Panel working in good condition, please maintain the equipment continuously according to recommendations from manufacturers and relative nation codes and laws. Take specific maintenance measures on the basis of different environments.

These LCD repeater Panel contain electronic parts. Even though it is made to last for a long period of time, any of these parts could fail at any time. Therefore, test your repeater at least every half-year according to national codes or laws. Any LCD repeater Panel, fire alarm devices or any other components of the system must be repaired and/or replaced immediately as they fail.