TX7222

Addressable Zone Monitor and Sounder Circuit Module
Installation and Operation Manual

Product Safety

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

TX7222 Addressable Zone Monitor and Sounder Circuit Module is an addressable interface module, which will integrate conventional detectors or conventional manual call points to addressable system. When any of the connected devices alarms are active, the module can send the alarm message to fire alarm controller, which generates alarm signal and displays its address. The module can match with the conventional optical smoke detector, conventional rate of rise and fixed temperature detector and conventional manual call point etc. It has the function of checking short or open circuit of the output connection, by the End of Line Resistor (EOLR). The fault massage includes open circuit, short circuit or any removal of the detectors.

The module is 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 module is compatible to the TX7004 Analogue Intelligent Fire Alarm Control Panel, produced by single manufacture TANDA, to avoid addressable communication compatibility problem.

1.2 Feature and Benefits

- Built-in MCU processor and digital addressing
- Intelligent self-diagnosis of open circuit
- Enhanced capacity of interference resistance by using multilevel wave filtering process
- LED status indicator
- Onsite Adjustable Parameter
- Loop and external power input
- Aesthetically pleasing design
- N,P terminal parallel connecting up to 32 conventional detector
- S+,S— terminal parallel connecting up to 10 conventional detector
- Module mounting with fix base for simple installation

1.3 Technical Specification

• Input Voltage	Loop Power:24VDC [16V to 28V] External PSU: 20 to 28VDC
• Current Consumption	Loop: Standby: 1.5mA, Alarm: 6mA External PSU: Standby15mA, Alarm: 500mA
• Control output voltage output TX7130 connects to the NP	24VDC (Only for the use of TX7130, The normally open interface of interface of the unit, Do not allow the short circuit)
• End of line Resistance	5.1Kohms/ ¼ W
• Protocol/Addressing	T&A, Value range from 1 to 254
• Indicator Status	Alarm LED:red,Normal: Single blink/Alarm: Steady Fault LED: yellow,Normal: Not bright/Fault: Steady Activation LED:red,Normal: Not bright/Active: Steady
• Material / Colour	ABS / White Glossy finishing
• Dimension / LWH	108 mm x 86 mm x38 mm
• Weight	162g (with Base), 87g (without Base)
• Operating Temperature	-10°C to +50°C
• Ingress Protection Rating	IP30
• Humidity	0 to 95% Relative Humidity, Non condensing

2 Installation

2.1 Installation Preparation

This Addressable Zone Monitor and Sounder Circuit Module 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.

TANDA products has available range of Addressable Zone Monitor Unit, each Unit is designed for specific application, it is essential to consider the requirement of both sides of the Unit to avoid malfunction and typical fault scenario. The main caution is to ensure that the voltage rating of the equipment and Unit are compatible.

2.2 Installation and Wiring

1. Mount the Addressable Zone Monitor and Sounder Circuit Module base on standard one [1] 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 [2]. Verify the device address and other parameters then stick on the label before attaching the Module. The sticker labels are available on the control panel. Align the Module and tabs and gently pushing the device until it locks into place.

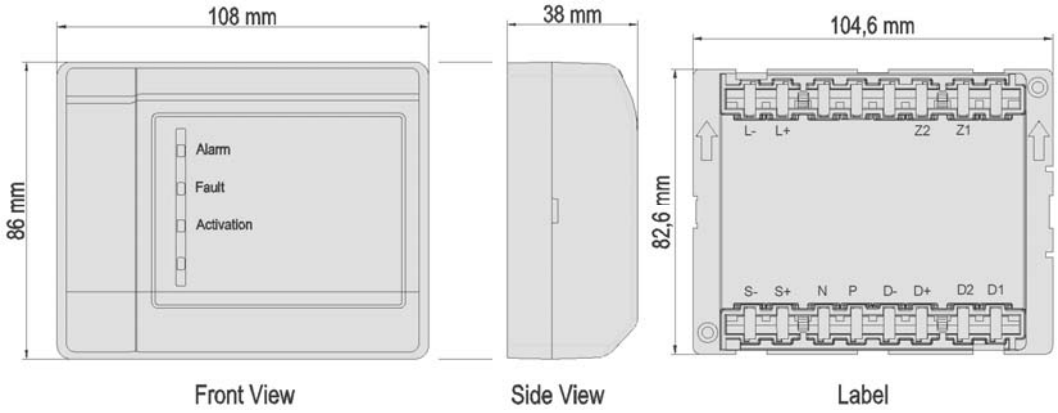

Figure 1: Modules Structure

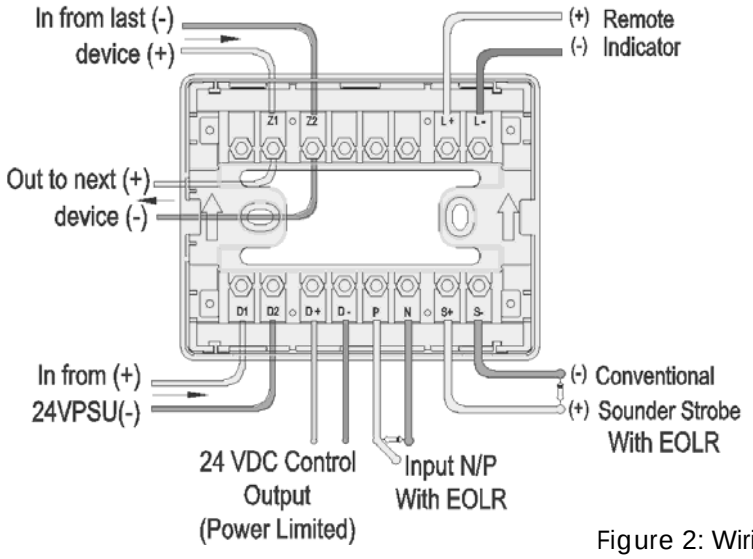

Figure 2: Wiring

Terminal Description

Z1 Signal In Non-polarity
Z2 Signal In Non-polarity
L+ Remote Indicator (+)
L- Remote Indicator (-)
D1 External Power Supply In (+)
D2 External Power Supply In (-)
D+, D- Output Cable(Only for the use of TX7130)
N connect detectors, Non-polarity
P connect detectors, Non-polarity
S+ Conventional Sounder Strobe (+)
S- Conventional Sounder Strobe (-)

3 Addressable Zone Monitor Unit Configuration

3.1 Preparation

The TX7932 handheld programmer is used to configure Addressable Zone Monitor and Sounder Circuit Module soft address and parameter. This tools are 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 Module conferring to the site situation and environmental requirements.

The TX7222 takes two addresses.Program a unique Two consecutive 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 Write: Addressing

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

   Note: If display **"Write Success",** means the entered address is confirmed. If display **"Write Fail",** means failure to program the address (Figure 6).

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

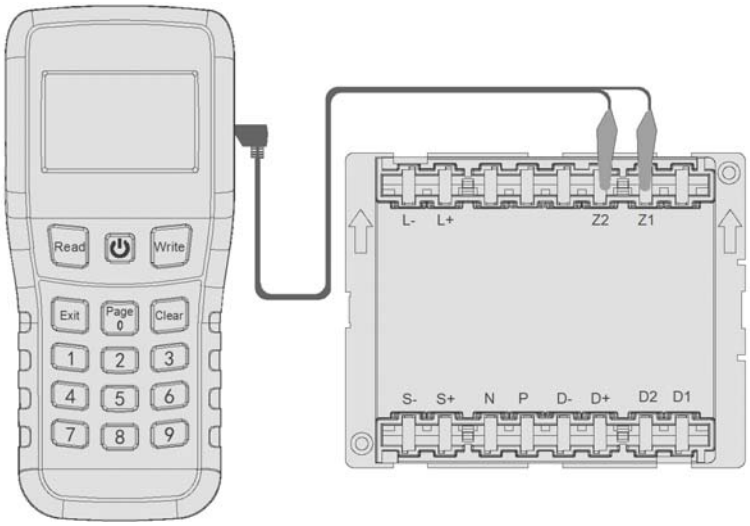

Figure 3: Programmer Connection Detail

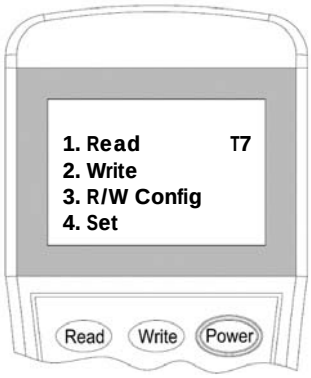

Figure 4

Figure 5

Figure 6

3.3 Input Check Mode

1. Input Check mode is use to enable the input cable monitoring, this option is available when parameter is set to 3Y with fitted end of line resistor. The module monitor will report to the panel in the event of open or short circuit occurs in the wiring.
2. Connect the programming cable to Z1 and Z2 terminals (Figure 3). Press **"Power"** to switch-on the programmer.
3. Switch-on the programmer, then press button **"3"** to enter to Configuration mode (Figure 7).
4. Input the **"3"** for Check mode then press **"Write"** to change the setting (Figure 8).
5. Parameter Description (Figure 9).
   Note: If display **"Success",** means the entered mode is confirmed. If display **"Fail",** means failure to program the mode.
6. Press **"Exit"** key to go back Main Menu. Press **"Power"** to switch off the programmer.

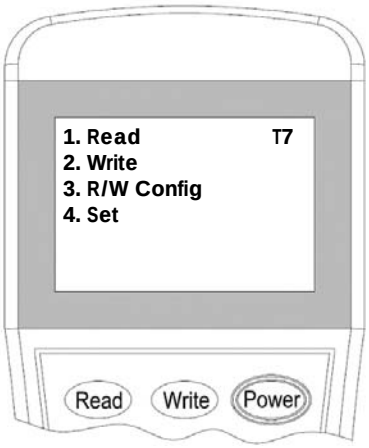

Figure 7

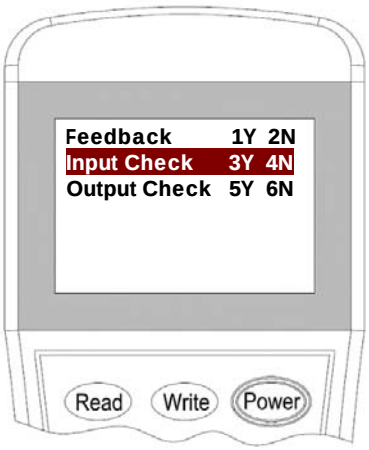

Figure 8

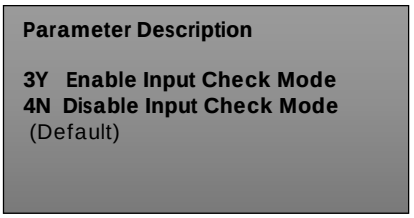

Figure 9

3.4 Output Check Mode

1. Output Check mode is use to enable voltage monitoring. The module will report to the panel in the event of low voltage output cause by open and short circuit occur in the wiring.
2. Connect the programming cable to Z1 and Z2 terminals (Figure 3). Press **"Power"** to switch-on the programmer.
3. Switch-on the programmer, then press button **"3"** to enter to Configuration mode (Figure 10).
4. Input the **"5"** for Check mode then press **"Write"** to change the setting (Figure 11).
5. Parameter Description (Figure 12).
   Note: If display **"Success",** means the entered mode is confirmed. If display **"Fail",** means failure to program the mode.
6. Press **"Exit"** key to go back Main Menu. Press **"Power"** to switch off the programmer.

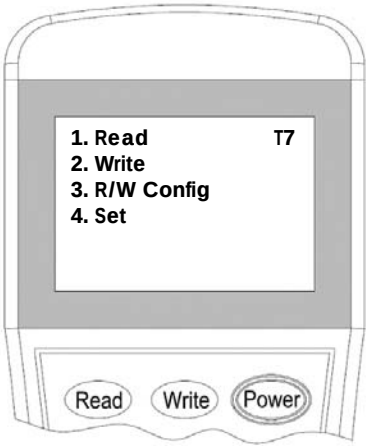

Figure 10

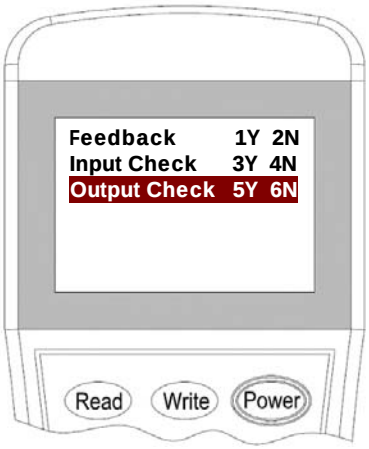

Figure 11

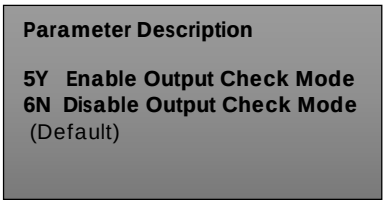

Figure 12

4 General Maintenance

1. Inform the suitable personnel before conducting the maintenance.
2. Disable Addressable Zone Monitor and Sounder Circuit Module on the control panel to prevent false alarm.
3. Do not attempt to repair the circuitry of the Addressable Zone Monitor and Sounder Circuit Module, it may affect the operation to respond to a fire condition and will void the manufacturer's warranty.
4. Use a damp cloth to clean the surface.
5. Notify again proper personnel after conducting the maintenance and make sure to enable the Addressable Zone Monitor and Sounder Circuit Module and confirm if up and running.
6. 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 Addressable Zone Monitor and Sounder Circuit Module cannot last forever. In order to keep the Addressable Zone Monitor and Sounder Circuit Module 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 Addressable Zone Monitor and Sounder Circuit Module contains 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 Addressable Zone Monitor and Sounder Circuit Module at least every half-year according to national codes or laws. Any Addressable Zone Monitor and Sounder Circuit Module, fire alarm devices or any other components of the system must be repaired and/or replaced immediately as they fail.