TX7221

Multichannel I/O 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

Table of Content

1 Introduction

1.1 Overview

TX7221 multichannel input and output module (hereinafter referred to as module) is a dedicated bus module device for fire protection, which can be connected with intelligent fire alarm controller.

This module is easy to install, and has active output port, passive output port and input port. Input port has a strong analytical ability to judge the input port for short circuit, open circuit and fire detection, and through the lights indicate the status.

1.2 Feature and Benefits

- A non polar bus of two wire
- four input detection ports, four contact output ports, one active output port.
- The input ports have the function of line fault detection
- Software and hardware filter technology is used to improve the anti-interference ability of the module

1.3 Technical Specification

• Bus protocol	T7 protocol
• Current Consumption	Bus monitoring current: ⩽1.5mA, Equipment monitoring current: ⩽25mA
• Power supply voltage	24VDC (18V~28V)
• Active output voltage	24VDC / 500mA
• Contact output voltage	24VDC / 2A (per circuit)
• Connection mode	Connected with the controller using non-polar bus of two wire; connected to the DC24V power supply using a non-polar two-wire connection
• Encoding method	electronic coding
• Dimension / LW	150 mm x 100 mm
• Weight	350g
• Operating Temperature	-10°C to +50°C
• Humidity	0 to 95% Relative Humidity, Non condensing

2 Installation

2.1 Installation Preparation

This interface module must be installed, commissioned and maintained by a qualified or factory trained service personnel.

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

2.2 installation and wiring

1. This module does not has shell and is fixed in the installation position through a screw hole. Installation screw： M3×8 Pan head screws with cross spring washer and plain washer assemblies, the installation method is shown in figure 1 .

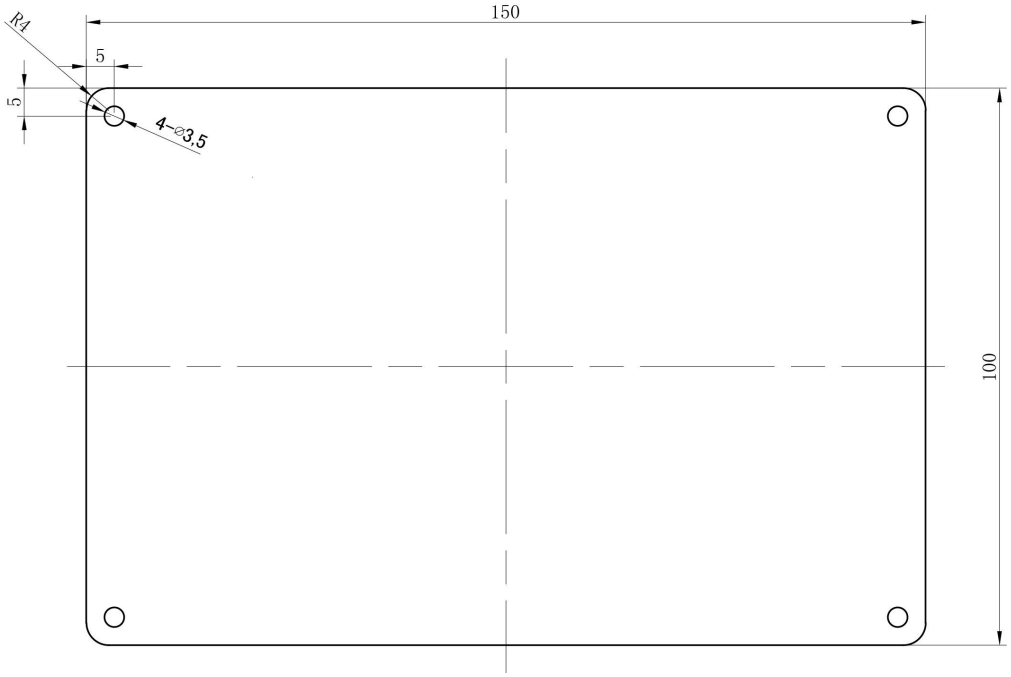

Figure 1 module outline diagram

2. Bus line use RVS-2×1.0mm² or 1.5mm²

   Power line use RVVP-2×1.5 mm² or 2.0mm².

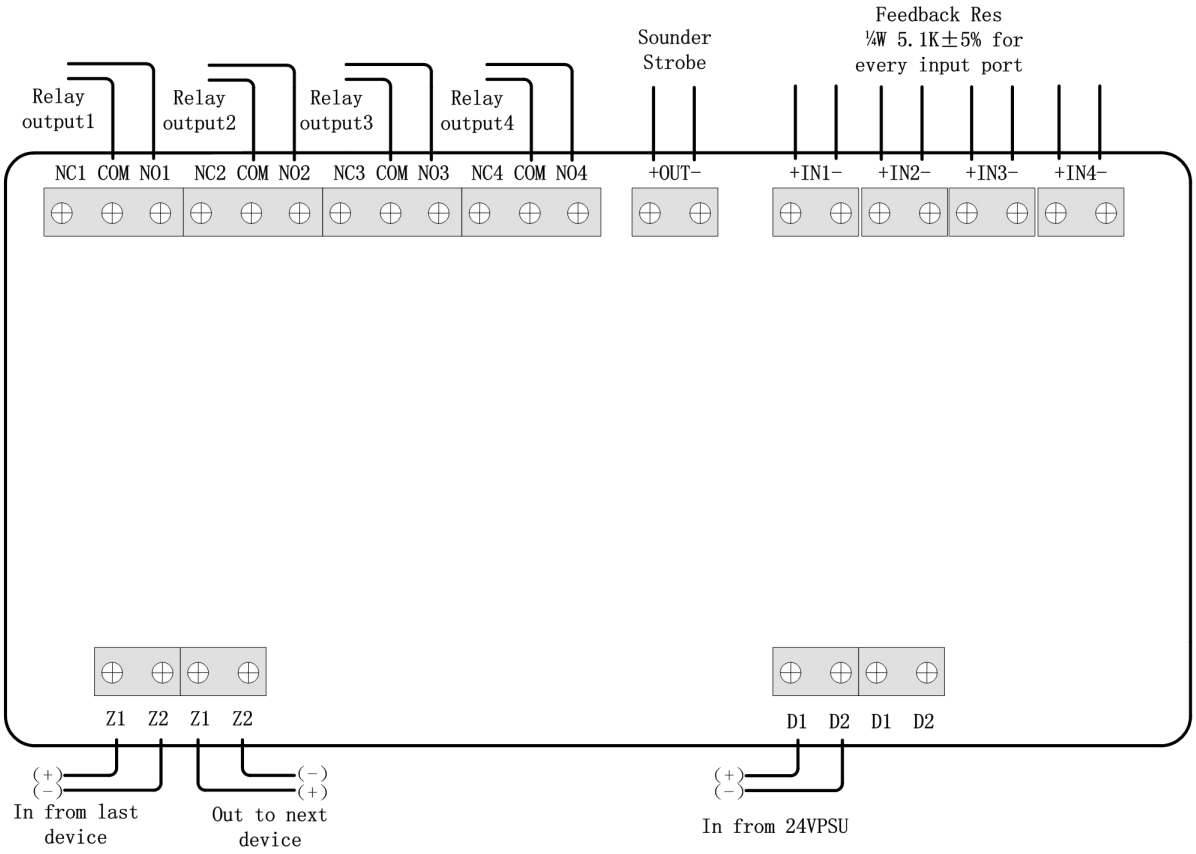

Figure 2 Wiring Details

Z1、Z2：Bus port

D1、D2：DC power supply port

NC、COM、NO：Passive output port

OUT：Active output port

IN+、IN-：Input port

3 Interface Module Configuration

3.1 Preparation

The TX7930 handheld programmer is used to configure interface module soft address and parameter. 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 module conferring to the site situation and environmental requirements.

Program a needed 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 unit.
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 **"Success",** means the entered address is confirmed. If display **"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.

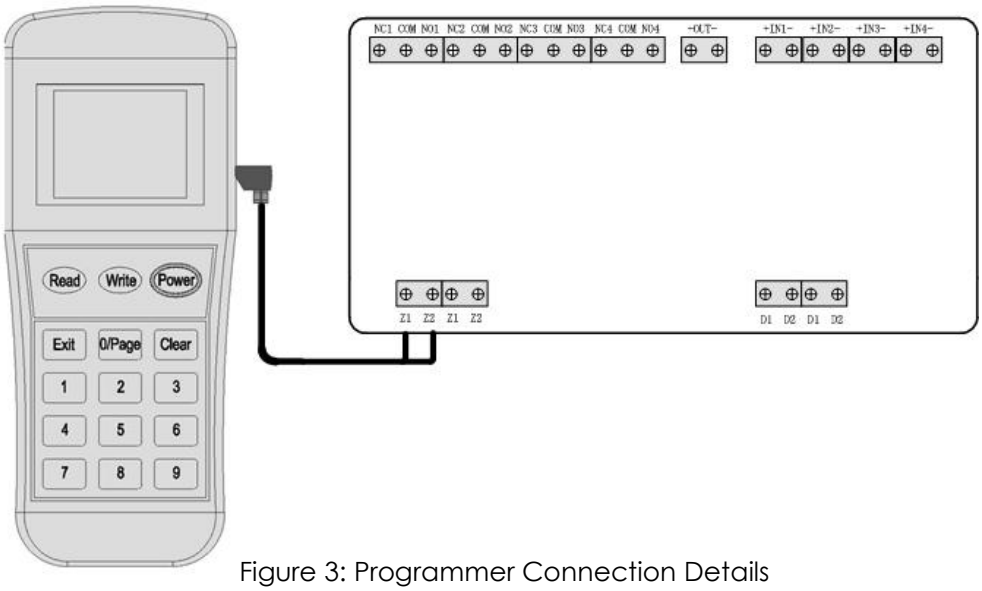

Figure 3: Programmer Connection Details

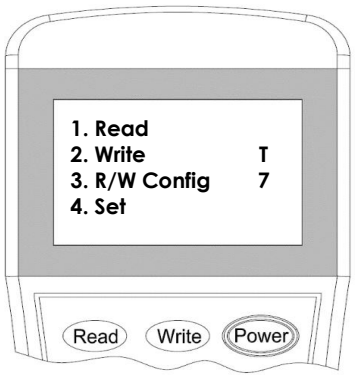

Figure 4

Figure 5

Figure 6

Note: the address of this module is a 9 address module, the electronic code is the first address, and the other 8 addresses are generated sequentially. The order of the address is in turn active output, 4 passive output, 4 input.

4 General Maintenance

1. Inform the suitable personnel before conducting the maintenance.
2. Disable the interface module on the control panel to prevent false alarm.
3. Do not attempt to repair the circuitry of the interface module, 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 interface module 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 Interface Module cannot last forever. In order to keep the interface 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 interface 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 module at least every half-year according to national codes or laws. Any interface module, fire alarm devices or any other components of the system must be repaired and/or replaced immediately as they fail.