# TN7300

Addressable Fire Telephone Jack Socket Installation and Operation Manual



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## 1 Introduction

# 1.1 Overview

TN7300 Addressable Fire Telephone Jack Socket (called the Jack Socket for short), a telephone port installed in the field can detect the plug in and hang up of an extension handset. It is suitable for hotels, restaurants, office buildings, teach buildings, banks, warehouses, libraries, computer rooms and switching rooms.

The Jack Socket can constitute a fire telephone system together with TN7000 Fire Telephone Control Panel, TN7100 Addressable Handset, TN7101 Extension Handset and TN7301 Fire Telephone Jack Socket.

#### 1.2 Features

- 1. Non-polarized two-wire for communication and talk, cost effective for wiring.
- 2. Using electronic addressing.
- 3. TN7301 Jack Socket can be connected.
- 4. The telephone line output port has the feature of open and short circuits checking.

## 1.3 Technical Specification

Part Number	TN7300				
Standard					
Compliance	GB 16806-2006				
Specification					
Operating Voltage	24V DC (Telephone bus 18V $\sim$ 28V)				
Operating Current	Standby Current≤600uA				
	Talk Current ≤25mA				
Load Capacity:	Connecting up to 150 TN7301 Jack Socket				
Programming	Electronically addressing for one code				
Wiring	Connect with the fire telephone control panel through non- polarized two-wire and with TN7301 Jack Socket through non-polarized telephone line				
End-of-line resistor	10k Ω				
Physical					
Čolour	Color of the Enclosure: white for the bottom and red for the front panel.				
Dimension	L:86.6 x W:86.6 x H:56.3 mm				
Weight	0.065 Kg				
Environmental					
Operating Temperature	-10°C to +55°C				
Relative Humidity	0 to 95% Relative Humidity, Non condensing				



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# 1.4 Structure

Fig. 1 shows dimensions and mounting of the Jack socket (unit: mm) .

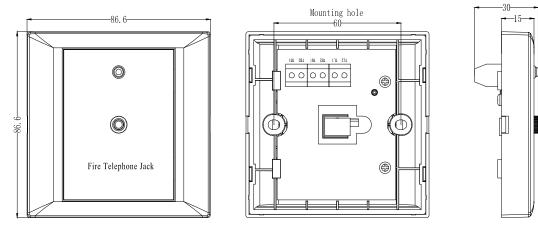


Fig. 1

## 2 Installation and Cabling

#### 2.1 Mounting

The Jack socket is flush mounted, and its bottom edge is  $1.3m \sim 1.5m$  high from the floor. The mounting is shown in Fig. 2. The back cover of the Jack is installed on the back box in the wall using two screws (Note the direction of "Fire Telephone Jack"). Then put on the top cover to finish Embedded box mounting.

#### 2.2 Terminals:

TB1, TB2: Terminals for telephone bus.

TL1, TL2: Terminals for telephone line, an end of line resistor is needed at the end.

#### 2.3 Wiring Requirements:

Telephone Bus: RVVP-2×1.5mm<sup>2</sup> or above shielded wire are used, laid through a metal pipe or flame retardant PVC pipe.

Telephone Line: RVVP-2×1.5mm<sup>2</sup> or above shielded wire are used, laid through a metal pipe or flame retardant PVC pipe.

#### 3 Operation

- 1. LED: It flashes red in polling every about 3.5 seconds
- 2. Programming: A handheld programmer produced from our company can be used to program the Jack Socket in the field. At the moment, the telephone output port can set to open checking. Refer to the handheld programmer manual for details.
- 3. Commission: Connect the Jack socket with an address with the telephone bus of the fire telephone control panel and then make registration. The LED should flash in polling. As an extension handset is plugged into, there should have a ring. After talking is connected, conversation with the fire telephone control panel can be received and transmitted.

## 4 Shipment and Storage

The Jack socket should be well packaged and gently taken to avoid damage while transporting,



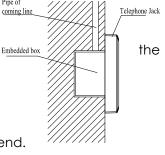


Fig. 2

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handling and storing. The environment for storing Jack socket should be ventilated and dry. However, open storage is not allowed in any way.

# 5 Cautions

- 1. Disconnect the power supply of the fire telephone control panel before installing the Jack Socket.
- 2. Check if there is an end of line resistor at the end of telephone line.
- 3. After installing the Jack socket, please notify the relevant authority before testing or maintaining.
- 4. Talk test of the Jack socket should be done regularly for its normal working.

# 6 Appendix A Quantity Calculation of Connected Jack Socket

The telephone line of TN7300 Jack Socket can provide maximum 3mA current for standby and load. The number of connected devices can be calculated based on the total standby current which is not more than 3mA.

The quantity of connected devices can be calculated according to the following table (unit: mA).

Model	Name of Product	Quantity		Standby Current	Total Standby Current
TN7301	Jack Socket	А	×	0.02	=
	(mA)				

So, the total standby current is:  $A \times 0.02 + B \times 0.05 \le 3$ 

