

T-Series Extended Power Supply User Manual_V1.1

T-PS02



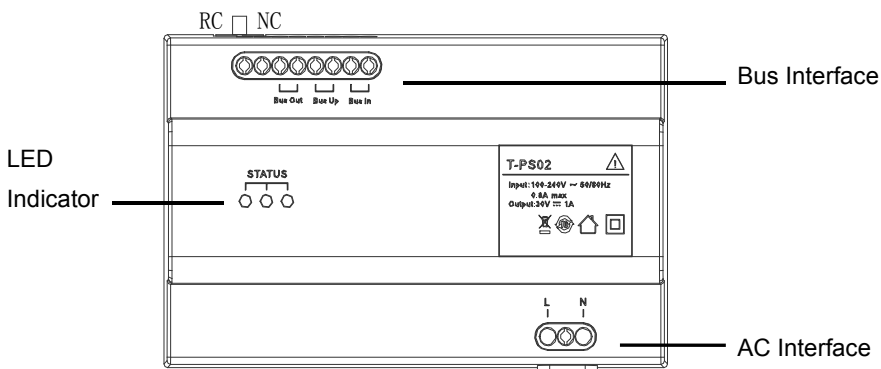
• Brief Introduction

This product is the extended power supply for T-Series video door phone system, it is mainly for power supply of rear system and video signal relay .
Bus interface includes **Bus In**, **Bus Out** and **Bus Up**.

• Function

- **Over-voltage Protection**
- **Over-current Protection**
- **Over-heat Protection**
- **Short circuit Protection**
- **Lightning Protection**
- **Video Enhance: 2x amplification for differential video signal**
- **Audio turns on only under intercom and ringing state**
- **Data receiving and transmitting**
- **Provide power for rear system and isolation for front power supply**
- **Front system connected detection**
- **Impedance Matching**

• Instruction




Wiring:
AC: **L connect to live wire, N connect to neutral wire** (Voltage input please refer to Parameters).
Bus Interface: Bus In、Bus Up、Bus Out.

LED Indicator:
The red light on the left will Flash while Bus is over-current.
The green light in the middle will be on while working, and flash while receiving data signal.
The green light on the right will be on while front system is connected and working..

RC/ON NC/OFF:
Switch turn to **RC/ON** means device is under Impedance Matching state.
Switch turn to **NC/OFF** means device is not under Impedance Matching state.

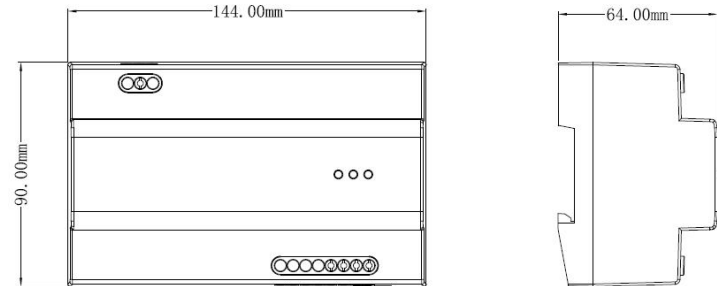
Bus Interface:
Bus In: Bus input.
Bus Up: Connection for next Extended Power Supply.
Bus Out: Output for amplified video signal.

• Parameters

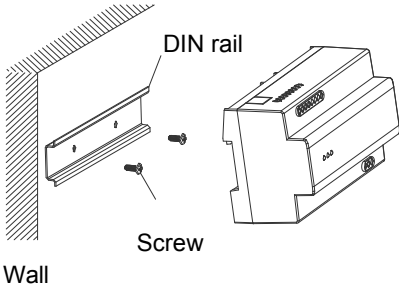
| No. | Name | | Parameter |
|-----|-------------|--------------------------|---|
| 1 | Input | Input Volt.Range | AC 100~240V |
| 2 | | Input Current | 0.8A Max. |
| 3 | | Input Freq.Range | 50/60Hz |
| 4 | | No-load Consumption | Power < 0.5W |
| 5 | | Work Efficiency | 88% TYP |
| 6 | Output | Output Volt. | DC 30V  1A |
| 7 | | Output Current | 1.0A Max. |
| 8 | Protection | Over-Current Protection | 2.5A ~ 3.5A |
| 9 | | Short Circuit Protection | Auto-recovery |
| 10 | | Over-heat Protection | 100℃±10℃ shutdown |
| 11 | | Lightning Protection | L-N: 1KV |
| 12 | Environment | Work Temp | -10℃~55℃ |
| 13 | | Storage Temp | -20℃~70℃ |
| 14 | | Work & Storage Humidity | 45%~90% |

• Dimension Diagram

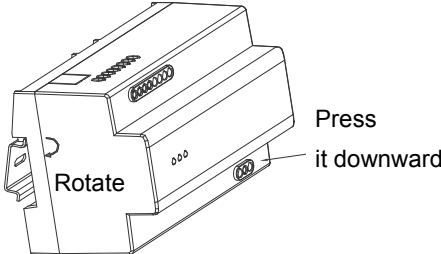
Dimension(L×W×D): 144×90×64 mm



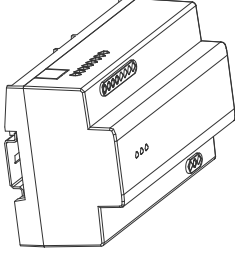
• Installation



Step 1: Fix DIN rail
(Fasten DIN rail with screws horizontally on the wall)



Step 2: Aim the power supply at the upper part of DIN rail, rotate and press the lower part to fasten it to the rail with a popping sound.

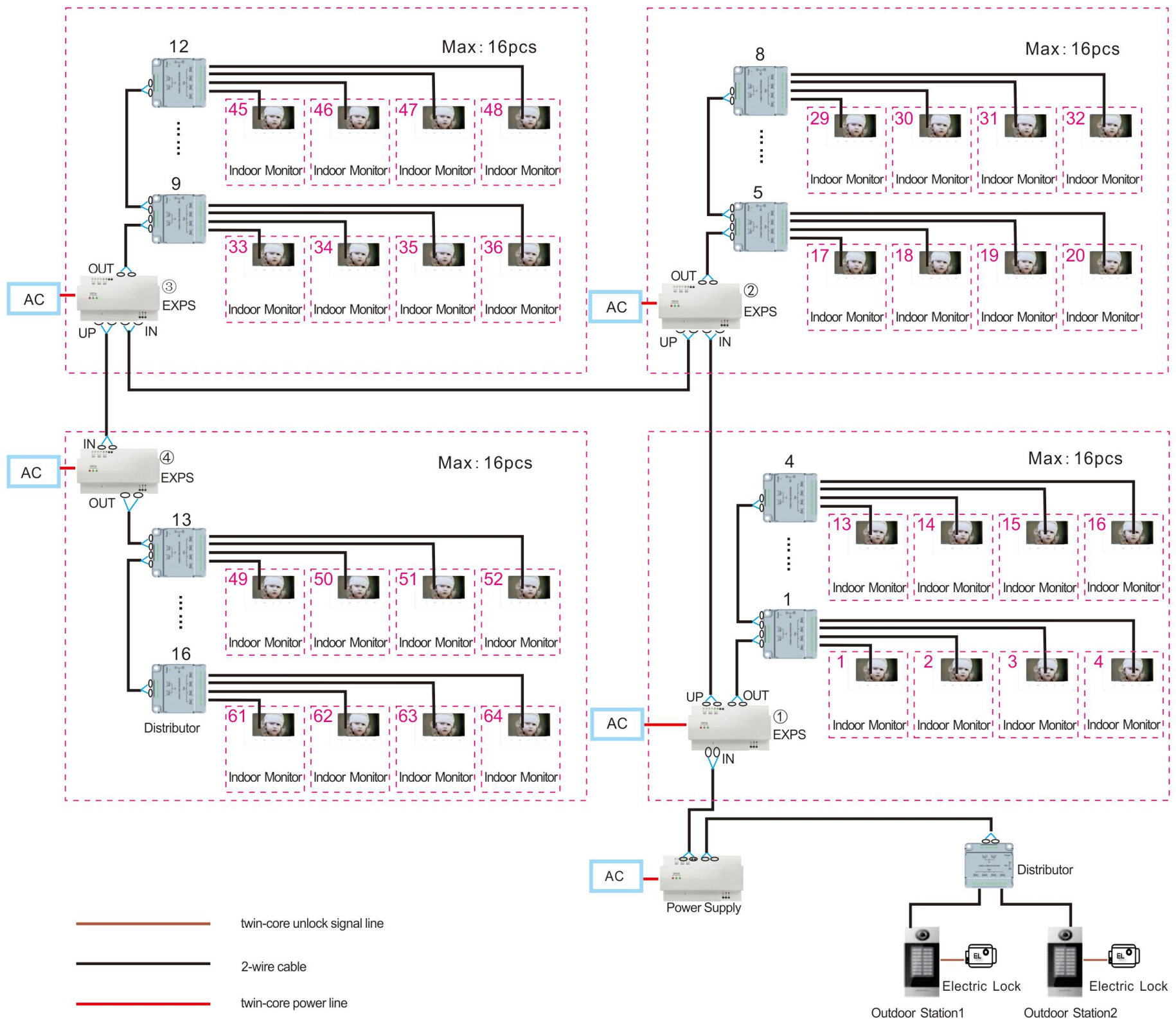


When it is properly installed in DIN rail

• Caution

1. Keep devices away from strong magnetic field, high-temp and wet environment
2. DO NOT drop the device to the ground or make them hard impact
3. DO NOT use wet cloth or volatile reagent to clean the device
4. DO NOT disassemble the device without professional guidance
5. Avoid disposing metal part in ports to avoid electric shock
6. NO reverse wires in both input and output
7. NO reverse wires in Bus Interface (IN、OUT、UP)

Topology of T-series Extended Power Supply



• Attention

1. Wiring for large system : **Bus In** of the first Extended Power Supply should be connected to System Power Supply, **Bus Up** to **Bus In** of the next Extended Power Supply, and **Bus Out** to Distributor, the specific wiring can refer to upper figure.
2. Each Extended Power Supply can support up to 16 Indoor Monitors, wiring for large system is suggested to find upper diagram for reference(System Power Supply only provide power for Outdoor Stations)
3. Wiring distance between 2 monitors which are using same Extended Power Supply should not exceed 15m, wiring distance between Distributor and Indoor Monitor should not exceed 5m.
4. A Distributor should be added if the wiring distance between 2 Extended Power Supply exceeded 40m.
5. A Hub should be added if it has more than 1 Outdoor Station within the system.
6. Wiring distance between Outdoor Station and Indoor Monitor should not exceed 150m.
7. Impedance Matching should turn on if any following scenario happens:
 - If **Bus Up** of terminal Extended Power Supply doesn't cascade to rear system, Impedance Matching should turn on(Extended Power Supply ④ should set **RC/ON** as in upper figure).
 - If terminal Distributor doesn't cascade to rear system, Impedance Matching should turn on(Distributor 4, 8, 12, 16 should set **RC/ON** as in upper figure).
 - If terminal Indoor Monitor doesn't cascade to other Indoor Monitor hand in hand, Impedance Matching should turn on (all Indoor Monitors should set **RC/ON** as in upper figure), If cascade to other Indoor Monitors, the last Indoor Monitor should set **RC/ON**.