

TX1N-485-BD-4 User's Manual

(I/O Expansion Board)

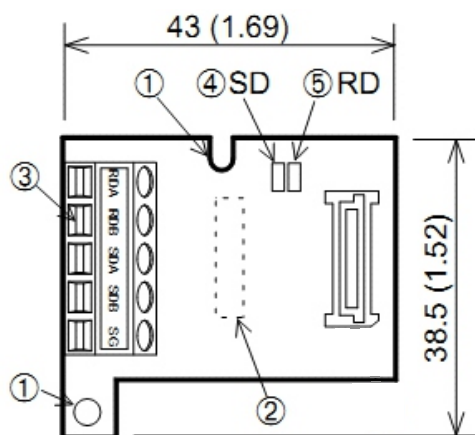
- ⇒ This manual describes the specifications for RS-485 communication board TX1N-485-BD-4.
- ⇒ For the complete operation, wiring, installation and programming instructions, please refer to TX1N Hardware Manual and Programming Manual.
- ⇒ Please read and understand this manual carefully before attempting to install and use this unit.

1. Introduction

The RS485 communication board TX1N-485-BD-4(hereafter referred to as 485BD) can be connected to TX1N basic unit and available for the applications described below.

- (1) No protocol communication
 The 485BD transfers data by using RS instruction between a personal computer, bar code reader and printer. As the 485BD is not equipped with buffer memory, it sends and receives data using data register specified by RS instruction. For the parameter setting and program example, refer to TX programming manual and TX communication manual.
- (2) Computer link by dedicated protocol
 The 485BD transfers the data when a personal computer directly specifies devices of the PLC. For the dedicated protocol and the communication setting, refer to the TX programming manual and TX communication manual.
- (3) Parallel link
 The 485BD transfers automatically auxiliary relays and data registers when two TX1N Series PLC's are connected on a one-to-one basis. For the setting procedure and program examples, refer to the TX communication manual.
- (4) N:N network
 The 485BD transfers data on the N:N basis. For the setting procedure and program examples, refer to the TX communication manual.

2. External dimensions



Unit : mm (inches)

① Mounting hole (2-Φ3.5mm)

② Connector for PLC

③ Terminal block for RS-485 equipment

The top face of this terminal box is higher than the top face of the PLC panel cover by approximately 7 mm.

④ RXD LED: Flicker at high speed during send

⑤ TXD LED: Flicker at high speed during receive

3. System configuration

For the system configuration, refer to TX programming manual and TX communication manual.

4. Characteristics

4.1 General characteristics

Same as the TX1N series programmable controller main unit.

4.2 Power characteristics

Power supplied by internal feed of the programmable controller main unit: 5V DC , 60mA

4.3 Performance specifications

Transmission standard	In conformance to RS485 and RS422.
Transmission distance	Max.50m
Communication type	No protocol, dedicated protocol (Format 1 or format 4) , parallel link, N:N network
LED indicator	SD, RD
Communication method	Half duplex, bi-directional
Transmission speed (baud rate)	Dedicated protocol and no protocol : 300 ~ 19,200(bps) Parallel link : 19,200 (bps) N:N network : 38,400 (bps)
Insulation	None

5. Safety precautions

- If any doubt at any stage during the installation of RS-485 communication board TX1N-485-BD-4, always consult a professional electrical engineer who is qualified and trained to local and national standards. If in doubt about the operation and use of the RS-485 communication board TX1N-485-BD-4, please consult the nearest HCFA distributor.
- All the examples and diagrams shown in this manual are intended only as an aid to understanding the text, not to guarantee the operation. HCFA Corporation will accept no responsibility for the actual use of the product based on these illustrative examples.
- Owing to the very great variety in possible application of this equipment, you must satisfy yourself as to its suitability for your specific application.
- This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. HCFA Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.
- Under no circumstances will HCFA Corporation be liable or responsible for any consequential damage that may arise as a result of the installation and use of this equipment.

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