**Applicable standards**

FX3U-422-BD units made in June, 2005 or later comply with the EC Directive (EMC Directive). Further information can be found in the following manual. However, the FX3UC-32MT-LT does not comply with the EC Directive (EMC Directive).

*→ FX3U Series Hardware Manual (Manual No. JY997D3101)*

**Attention**

This product is designed for use in industrial applications.

### 1. Outline

FX3U-422-BD is an expansion board with a port for connecting a programming tool, GOT or ET Series.

#### 1.1 Incorporated Items

- **Product**: RS-422 communication expansion board FX3U-422-BD
- **Accessories**: M3 tapping screws for installation: 2 pcs.
- **Installation Manual** (This manual)

#### 1.2 External Dimensions and Part Names

![Diagram](image)

- **Unit:mm** (inches)
  - 55.3 (2.17)
  - 31.2 (1.23)

**Mass**: (Weight): Approx. 20g (0.055lbs)

### 2. Installation

**INSTRUCTION PRECAUTIONS**

- **WARNING**
  - Make sure to cut off all phases of the power supply electrically before attempting installation or wiring work.
  - Failure to do so may cause electric shock or damage to the product.

**INSTRUCTION PRECAUTIONS**

- **CAUTION**
  - Use the product within the generic environment specifications described in PLC main unit (Hardware Edition) and PLC programming manual (Basic & Applied Instruction Edition).
  - Never use the product in areas with excessive dust, oil, smoke, conductive dusts, corrosive gases (carbon monoxide, CO; H2; SO2; NO2), flammable gas, vibrations, or impacts, or expose it to high temperature, condensation, or rain and wind.
  - If the product is used in such conditions, electric shock, fire, malfunctions, deterioration or damage may occur.
  - Use screws and nuts carefully when performing installation work, thus avoiding accidental or product damage.
  - When drilling screw holes or wiring, make sure cutting or wire debris does not enter the ventilation slots.
  - Failure to do so may cause fire, equipment failures or malfunctions.
  - Do not touch the conductive parts of the product directly.
  - When installing, connect the expansion board securely to their designated connectors. Loose connections may cause malfunctions.

**For the installation and removal, refer to the PLC main unit manual.**

### 3. Specifications

#### 3.1 Applicable PLC

- **Model name**: FX3U Series PLC
  - Ver.2.20 or later (from first production)
- **Model name**: FX3UC-32MT-LT
  - Ver.1.00 or later (from first production)
- **Model name**: FX3UC-32MT-LT-2
  - Ver.2.53 or later (from first production)

**DISPOSAL PRECAUTIONS**

- **WARNING**
  - The product is a precision instrument. During transportation, avoid impacts larger than those specified in the general specifications by using dedicated packaging boxes and shock-absorbing pallets. Failure to do so may cause failures in the product. After transportation, verify operation of the product and check for damage of the mounting part, etc.

**DISPOSAL PRECAUTIONS**

- **CAUTION**
  - Please contact a certified electronic waste disposal company for the environmentally safe recycling and disposal of your device.

#### 3.2 General Specifications

- **Connection method**: 8-pin MINI DIN (female)
- **Communication method**: 2N-422IF
- **Communication format**: 9600bps, 8 data bits, 1 stop bit, No parity
- **Transmission margin**: 50 m (164ft) maximum
- **Maximum transmission distance**: 50 m (164ft) maximum
- **Transmission standard**: in conformance to RS-422
- **Communication method**: Half-duplex
- **Communication format**: Programming communication
- **Insulation**: Not insulated (between communication line and CPU)

### 3.3 Power supply specifications

- **Power supply**: 5V DC, 20 mA is supplied from the internal power supply of the main unit. However, current consumption becomes higher depending on the connected peripheral equipment. For details, refer to the manual of the connected unit.

### 3.4 Communication specifications

#### 3.4.1 Specifications

<table>
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<tr>
<th>Item</th>
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### 3.5 Application

- **Application**: Basic/applied instructions and other tasks.

This manual describes the specifications and installation details for the FX3U-422-BD. For wiring with communication equipment, system configuration, communication settings, and program examples, refer to the "FX Series User's Manual - Data Communication Edition".


**Manual No.**: JY997D1601

**Publication Date/Revision**

- **Manual Number**: JY997D1601
- **Revision**: R

**Effective June 2018**

Specifications are subject to change without notice.

Manufactured in accordance with all applicable instructions and other tasks.

**For product manuals or documents, consult with the Mitsubishi Electric dealer from whom you purchased your product.**

**To obtain manuals**

For product manuals or documents, consult with the Mitsubishi Electric dealer from whom you purchased your product.

**How to obtain manuals**

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