MITSUBISHI

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PROGRAMMABLE CONTROLLERS
MELSEC-F

FX3G-5DM

INSTALLATION MANUAL

FX3G

Manual Number	JY997D33801
Revision	B
Date	September 2008

This manual describes the part names, dimensions, mounting, and specifications of the product. Before use, read this manual and the manuals of all relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions.
Store this manual in a safe place so that it can be taken out and read whenever necessary. Always forward it to the end user.
Registration:
The company and product names described in this manual are registered trademarks or the trademarks of their respective companies.

Effective September 2008
Specifications are subject to change without notice.
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Safety Precaution (Read these precautions before use.)

This manual classifies the safety precautions into two categories:
◇DANGER and ⚠CAUTION .

◇DANGER	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠CAUTION	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Depending on the circumstances, procedures indicated by ⚠CAUTION may also cause severe injury.
It is important to follow all precautions for personal safety.

Associated Manuals

Manual name	Manual No.	Description
FX3G Series User's Manual - Hardware Edition	JY997D31301 MODEL CODE: 09R521	Explains the FX3G Series PLC specifications for I/O, wiring, installation, and maintenance.

How to obtain manuals
For product manuals or documents, consult with the Mitsubishi Electric dealer from who you purchased your product.
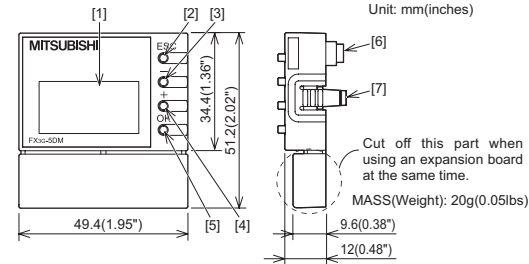
1. Outline

The FX3G-5DM display module (hereinafter called display module) is installed to the FX3G main unit to monitor/change device states and values.

1.1 Incorporated Items

Product	FX3G-5DM display module
Included items	Installation Manual (This manual)

1.2 External Dimensions and Part Names

Unit: mm(inches)

MASS(Weight): 20g(0.05lbs)

No.	Name	Description
[1]	Display	Displays current time and monitored status of device.
[2]	"ESC" button	Use to cancel operation or return to previous screen.
[3]	"-" button	Use to move cursor or set the value.
[4]	"+" button	Use to move cursor or set the value.
[5]	"OK" button	Use to choose the item, set the value, etc.
[6]	Connector for main unit	Used to connect display module to main unit.
[7]	Display module fixing hook	Used to fix display module to main unit.

2. Installation

INSTALLATION PRECAUTIONS	◇DANGER

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

INSTALLATION PRECAUTIONS	⚠CAUTION

- Use the product within the generic environment specifications described in PLC main unit manual (Hardware Edition).
  Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl2, H2S, SO2, or NO2), flammable gas, vibration or impacts, or expose it high temperature, condensation, or rain and wind.
  If the product is used in such conditions, electric shock, fire, malfunctions, deterioration or damage may occur.
- Do not touch the conductive parts of the product directly.
  Doing so may cause device failures or malfunctions.
- Connect the display module securely to their designated connectors.
  Loose connections may cause malfunctions.

The following section describes the installation method for the FX3G Series PLC (FX3G-40M□. In this example).
Turn off the power to the PLC before installation.
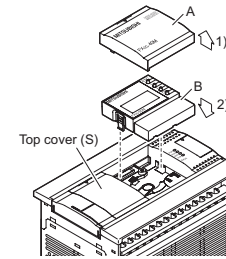For more details on installation and removal, refer to the PLC main unit manual.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

2.1 When Installing the Memory Cassette Directly to the Main Unit

1) Remove the top cover (A' in the figure on the right).

Caution
Display module cannot attach to the top cover(S) side of a 40/60-point types main unit.

2) Make sure the display module (B in the figure on the right) is in parallel with the main unit and attach it to the optional equipment connector.

Top cover (S)

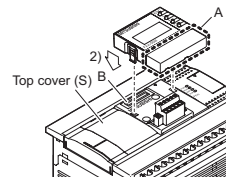## 2.2 When Using the Memory Cassette Together with an Expansion Board

Assuming that the expansion board is attached to the main unit.
The connector cover for the expansion board is removed.
To attachment of the expansion board, refer to the following manual.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

1) Cut off the part A shown in the right figure (display module).
2) Make sure the display module is in parallel with the main unit and attach it to the optional equipment connector (B in the figure on the right).

Caution
Display module cannot attach to the top cover(S) side of a 40/60-point types main unit.

Top cover (S) B

For details on installation and removal, refer to the following manual.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

3. Specifications

STARTUP AND MAINTENANCE PRECAUTIONS	⚠CAUTION

- Do not disassemble or modify the PLC.
  Doing so may cause fire, equipment failures, or malfunctions.
  * For repair, contact your local Mitsubishi Electric distributor.
- Do not drop the product or exert strong impact to it.
  Doing so may cause damage.

DISPOSAL PRECAUTIONS	⚠CAUTION

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

TRANSPORT AND STORAGE PRECAUTIONS	⚠CAUTION

- The product is a precision instrument. During transportation, avoid any impacts. Failure to do so may cause failures in the product. After transportation, verify the operations of the product.

3.1 Applicable PLC

Model name	Applicability
FX3G Series PLC	Ver.1.10 or later

- Only one display module can be used per main unit.
For details on the system configuration, refer to the following manual.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

3.2 General Specifications

The general specifications are equivalent to the PLC main unit.
For general specifications, refer to the following manuals.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

3.3 Display Specifications

Item	Specifications	
Display device	STN monochrome liquid crystal display	
Backlight	Green LED backlight	
Displayed letters	Number of letters	16 letters (half-width character) × 4 lines
	Character	Alphabets, Numbers, Japanese character
	Language for menu display	English/Japanese
Button	4 operation buttons (OK, ESC, +, and -)	

4. Function List

The functions of a display module are listed as follows:
For details on the functions, refer to the following manuals.
→ **Refer to the FX3G Series User's Manual - Hardware Edition**

- Monitor/Test
- ErrorCheck
- LANGUAGE
- Contrast adjust
- Clock setting
- Keyword
- Memory cassette transfer
- Operation button ON/OFF information
- Hexadecimal current value display setting
- Display screen protect function
- Specified device monitor function
- Screen saver function

Warranty
Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

⚠ For safe use

- This product has been manufactured as a general-purpose part for general industries, and has not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi Electric.
- This product has been manufactured under strict quality control. However when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system.

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