ADVANCED AND EVER ADVANCING MITSUBISHI ELECTRIC

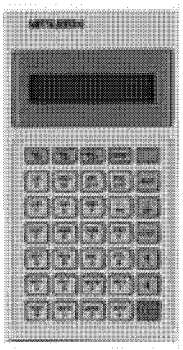
MITSUBISHI

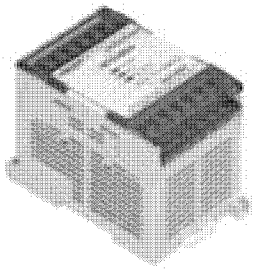
PROGRAMMABLE CONTROLLERS

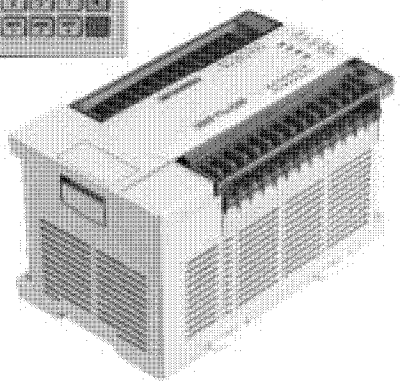
MELSEC-F

PROGRAMMING MANUAL

THE FX SERIES OF PROGRAMMABLE CONTROLLER
(FX_0, FX_{0S}, FX_{0N}, FX, FX_{2C}, FX_{2N}, FX_{2NC})







FX

FX Series Programmable Controllers

Programming Manual

Manual number : JY992D48301
Manual revision : J
Date : November 1999

Foreword

- This manual contains text, diagrams and explanations which will guide the reader in the correct programming and operation of the PLC.
- Before attempting to install or use the PLC this manual should be read and understood.
- If in doubt at any stage of the installation of the PLC always consult a professional electrical engineer who is qualified and trained to the local and national standards which apply to the installation site.
- If in doubt about the operation or use of the PLC please consult the nearest Mitsubishi Electric distributor.
- This manual is subject to change without notice.

FAX BACK - Combined Programming Manual (J)

Mitsubishi has a world wide reputation for its efforts in continually developing and pushing back the frontiers of industrial automation. What is sometimes overlooked by the user is the care and attention to detail that is taken with the documentation. However,to continue this process of improvement, the comments of the Mitsubishi users are always welcomed. This page has been designed for you,the reader,to fill in your comments and fax them back to us. We look forward to hearing from you.

Please tick the box of your choice;

Fax numbers:		Your name.....
Mitsubishi Electric....		.....
America	(01) 847-478-2253	Your company .....
Australia	(02) 638-7072	.....
Germany	(0 21 02) 4 86-1 12	Your location: .....
South Africa	(0111) 444-8304	.....
United Kingdom	(01707) 278-695	

What condition did the manual arrive in?	☐Good	☐Minor damage	☐Unusable
Will you be using a folder to store the manual?		☐Yes	☐No
What do you think to the manual presentation?		☐Tidy	☐Un-friendly
Are the explanations understandable?	☐Yes	☐Not too bad	☐Unusable

Which explanation was most difficult to understand: .....
.....

Are there any diagrams which are not clear?	☐Yes	☐No

If so,which: .....

What do you think to the manual layout?	☐Good	☐Not too bad	☐Un-helpful

If there one thing you would like to see improved,what is it?.....
.....
.....

Could you find the information you required easily using the index and/or the contents,if possible please identify your experience: .....
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Do you have any comments in general about the Mitsubishi manuals? .....
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Thank you for taking the time to fill out this questionnaire. We hope you found both the product and this manual easy to use.

Guidelines for the Safety of the User and Protection of the Programmable Controller (PLC)

This manual provides information for the use of the FX family of PLC's. The manual has been written to be used by trained and competent personnel. The definition of such a person or persons is as follows;

a) Any engineer who is responsible for the planning, design and construction of automatic equipment using the product associated with this manual should be of a competent nature, trained and qualified to the local and national standards required to fulfill that role. These engineers should be fully aware of all aspects of safety with regards to automated equipment.

b) Any commissioning or service engineer must be of a competent nature, trained and qualified to the local and national standards required to fulfill that job. These engineers should also be trained in the use and maintenance of the completed product. This includes being completely familiar with all associated documentation for the said product. All maintenance should be carried out in accordance with established safety practices.

c) All operators of the completed equipment should be trained to use that product in a safe and coordinated manner in compliance to established safety practices. The operators should also be familiar with documentation which is connected with the actual operation of the completed equipment.

Note : the term 'completed equipment' refers to a third party constructed device which contains or uses the product associated with this manual.

Note's on the Symbols used in this Manual

At various times through out this manual certain symbols will be used to highlight points of information which are intended to ensure the users personal safety and protect the integrity of equipment. Whenever any of the following symbols are encountered its associated note must be read and understood. Each of the symbols used will now be listed with a brief description of its meaning.

Hardware Warnings

1) Indicates that the identified danger **WILL** cause physical and property damage.

2) Indicates that the identified danger could **POSSIBLY** cause physical and property damage.

3) Indicates a point of further interest or further explanation.

Software Warnings

4) Indicates special care must be taken when using this element of software.

5) Indicates a special point which the user of the associate software element should be aware of.

6) Indicates a point of interest or further explanation.

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