MITSUBISHI

GRAPHIC OPERATION TERMINALS
MELSEC-GOT

Changes for the Better

GOT-*F900*

F9GT-40FMB memory board

USER'S MANUAL

JY992D98601D

This manual contains text, diagrams and explanations which will guide the reader in the correct installation, safe use and operation of the F9GT-40FMB memory board and should be read and understood before attempting to install or use the unit. See the Further Information Manual Lists for more reference documents.

Specifications are subject to change without notice

Guidelines for the Safety of the User and Protection of the F9GT-40FMB memory board.

This 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 using the product associated with this manual, should be of a competent nature, trained and qualified to the local and national standards. 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.

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.

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

Notes 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.

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.

• Under no circumstances will Mitsubishi Electric be liable responsible for any consequential damage that may arise as a result of the installation or use of this equipment.

• All examples and diagrams shown in this manual are intended only as an aid to understanding the text, not to guarantee operation. Mitsubishi Electric will accept no responsibility for 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.

Further Information Manual Lists

	Manual Name	Manual Number	Description
⊙	F9GT-40FMB memory board USER'S MANUAL	JY992D98601 (This manual)	This manual contains explanations for the installation, operation, etc. of the F9GT-40FMB memory board.
⊙	GOT-F900 Series Operation Manual	JY992D94701	This manual contains explanations for the operation and use of the GOT-F900 series graphic operation terminals.
O	GOT-F900 Series Hardware Manual (connection diagram)	JY992D94801	This manual contains explanations for the wiring and installation, etc. of the GOT-F900 series graphic operation terminals.

⊙ Indispensable manual　O Either manual is necessary.

1. Outline of Product

When using F930GOT-K-E, F940GOT-E, F943GOT-E or F940WGOT-E, screen data transfer is enabled between the built-in flash memory and F9GT-40FMB memory board (hereafter referred to as F9GT-40FMB or memory board).

1.1 Features

1) Use of the drawing software is not required. Screen data can be easily transferred between the F9GT-40FMB and the GOT modules listed in section 1.2.

2) Screen data can be efficiently written to multiple GOTs.

1.2 Applicable Version

Product model name	Version
F940GOT-E, F943GOT-E	V6.40
F940WGOT-E	V1.40
F930GOT-K-E	V4.90

Note;

- When F9GT-40FMB is used with a GOT version earlier than listed above, the F9GT-40FMB data is written automatically to the GOT regardless of the switch position.
  The screen showing the direction of information flow is not displayed.

- Not available in the F920GOT-K-E, F930GOT-E or Handy GOT

2. F9GT-40FMB Specifications

Note;

- Do not conductive mount the F9GT-40FMB in an environment that contains dust, soot, corrosive or conducive dust, corrosive or flammable gas, or expose the unit to high temperatures, dew condensation, direct sunlight, rain and wind, or impact and vibration.
  If the F9GT-40FMB is used in such a place, electrical shock, fire, malfunction, damages or deterioration may occur.

- Make sure the power is Off before securely connecting the GOT and F9GT-40FMB.
  Poor connection may cause malfunction.

2.1 General Specifications

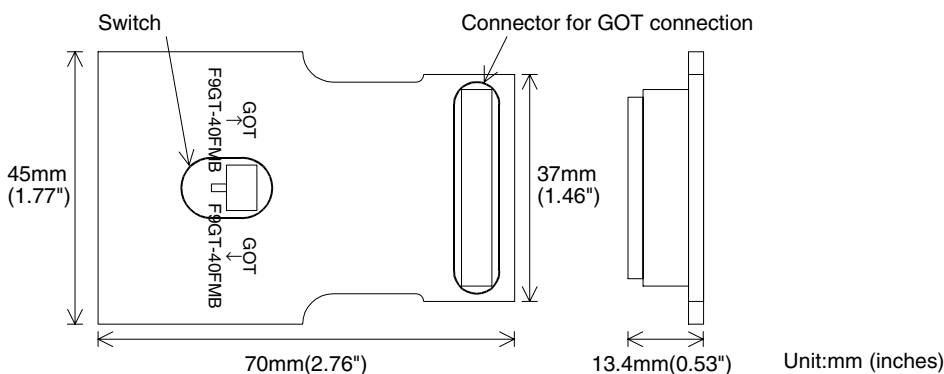| Item	Specifications
Temperature	Use: 0 to 40°C (32 to 104°F) Storage: -20 to 60°C (-4 to 140°F)
Humidity	Use: 35 to 85%RH (No condensation)
Working atmosphere	Must be free of lamp black, corrosive gas, flammable gas, or excessive amount of electroconductive dust particles and must be no direct sunlight. (Same as for saving)

2.2 Power Supply Specifications

Item	Specifications
Power supply voltage	5V DC ±5% (supplied from the GOT)
Current consumption	80mA

2.3 Performance specification

Item	Specifications
User memory	Flash memory 1MB

2.4 Outside Dimension

Switch — Connector for GOT connection

45mm (1.77")   70mm(2.76")   37mm (1.46")   13.4mm(0.53")   Unit:mm (inches)

- Switch
  The direction to forward the screen data is selected.

  Direction of forwarding: F9GT-40FMB→GOT or GOT→F9GT-40FMB

- Connector for GOT connection
  The connector for the GOT is attached to the enhancing interface port in the back of GOT.
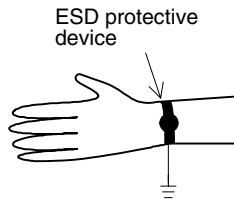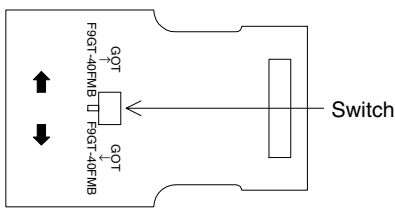
3. Operation Method

Note;

- Attach the F9GT-40FMB when the GOT power supply is OFF or data may be lost.

- Operate the F9GT-40FMB only after ESD precautions have been taken or data may be lost.

- Operate the touch switch of GOT by hand. Please take care to avoid using hard or sharp tipped objects or excessive force when pressing the touch Keys.
  Damage to the screen may occur.

- Do not turn off the power supply of GOT during data transfer or data may be lost.

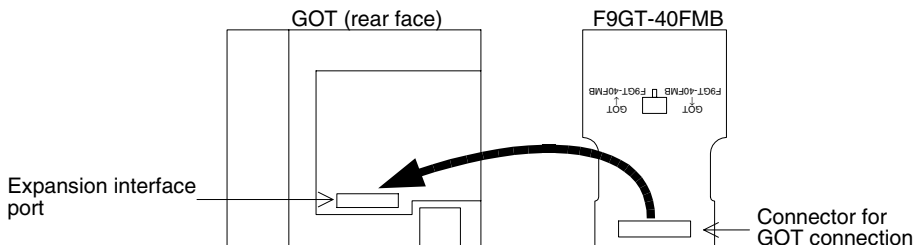1) Choose the transfer direction (F9GT-40FMB → GOT or GOT → F9GT-40FMB) using the switch on the F9GT-40FMB

⚠ Note;
- When F9GT-40FMB is used with a GOT version earlier than the applicable version, the F9GT-40FMB data is written automatically to the GOT regardless of the switch position.

Switch

ESD protective device

2) After making sure the power of the GOT is OFF, connect the F9GT-40FMB to the expansion interface on the rear face of the GOT.

GOT (rear face) F9GT-40FMB

Expansion interface port

Connector for GOT connection

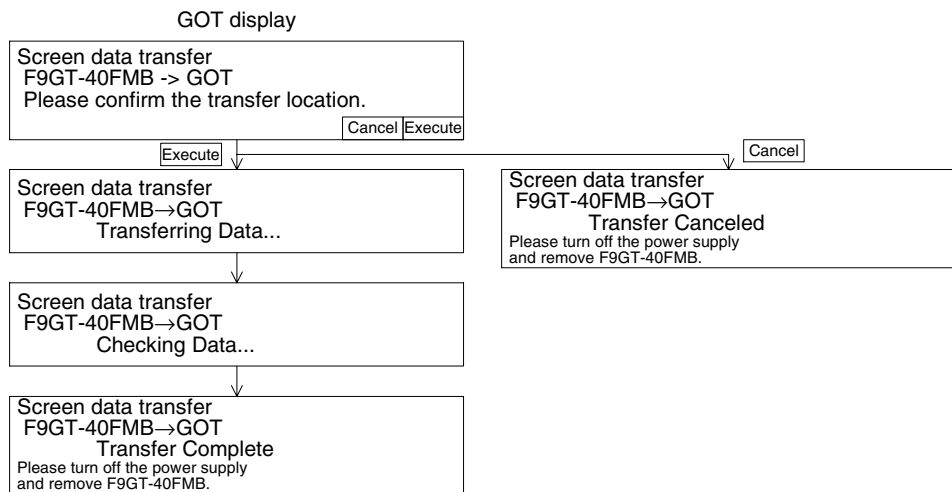3) Turn the power ON. A transfer screen is automatically displayed according to the switch state.
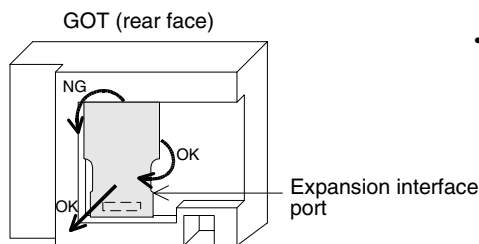
⚠ Note;
- When F9GT-40FMB is used with a GOT version earlier than the applicable version, the screen showing the direction of information flow is not displayed.

Pressing The Execute Key begins the transfer.(transfer and collation)
Pressing The Cancel Key cancels the transfer.

GOT display

Screen data transfer
F9GT-40FMB -> GOT
Please confirm the transfer location.
Cancel Execute

Screen data transfer
F9GT-40FMB→GOT
Transferring Data...

Screen data transfer
F9GT-40FMB→GOT
Checking Data...

Screen data transfer
F9GT-40FMB→GOT
Transfer Complete
Please turn off the power supply and remove F9GT-40FMB.

Screen data transfer
F9GT-40FMB→GOT
Transfer Canceled
Please turn off the power supply and remove F9GT-40FMB.

4) When the transfer is completed, turn off the power and detach the F9GT-40FMB.

GOT (rear face)

NG

OK

OK

Expansion interface port

- Detach by pulling or the side of the F9GT-40FMB or by removing directly upward.
  Pulling the top of the F9GT-40FMB may cause damage to the GOT's expansion interface port.

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 the detailed warranty, refer to the GOT-F900 Series HARDWARE MANUAL [CONNECTION].

◢◣ MITSUBISHI ELECTRIC CORPORATION

MITSUBISHI

GRAPHIC OPERATION TERMINALS
MELSEC-GOT

GOT-F900

Changes for the Better

F9GT-40FMB memory board

USER'S MANUAL

JY992D98601D

This manual contains text, diagrams and explanations which will guide the reader in the correct installation, safe use and operation of the F9GT-40FMB memory board and should be read and understood before attempting to install or use the unit. See the Further Information Manual Lists for more reference documents.

Specifications are subject to change without notice

Guidelines for the Safety of the User and Protection of the F9GT-40FMB memory board.

This 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 using the product associated with this manual, should be of a competent nature, trained and qualified to the local and national standards. 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.

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.

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

Notes 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.

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.

- Under no circumstances will Mitsubishi Electric be liable responsible for any consequential damage that may arise as a result of the installation or use of this equipment.
- All examples and diagrams shown in this manual are intended only as an aid to understanding the text, not to guarantee operation. Mitsubishi Electric will accept no responsibility for 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.

Further Information Manual Lists

	Manual Name	Manual Number	Description
⊙	F9GT-40FMB memory board USER'S MANUAL	JY992D98601 (This manual)	This manual contains explanations for the installation, operation, etc. of the F9GT-40FMB memory board.
⊙	GOT-F900 Series Operation Manual	JY992D94701	This manual contains explanations for the operation and use of the GOT-F900 series graphic operation terminals.
○	GOT-F900 Series Hardware Manual (connection diagram)	JY992D94801	This manual contains explanations for the wiring and installation, etc. of the GOT-F900 series graphic operation terminals.

⊙ Indispensable manual   ○ Either manual is necessary.

1. Outline of Product

When using F930GOT-K-E, F940GOT-E, F943GOT-E or F940WGOT-E, screen data transfer is enabled between the built-in flash memory and F9GT-40FMB memory board (hereafter referred to as F9GT-40FMB or memory board).

1.1 Features

1) Use of the drawing software is not required. Screen data can be easily transferred between the F9GT-40FMB and the GOT modules listed in section 1.2.

2) Screen data can be efficiently written to multiple GOTs.

1.2 Applicable Version

Product model name	Version
F940GOT-E, F943GOT-E	V6.40
F940WGOT-E	V1.40
F930GOT-K-E	V4.90

Note;
- When F9GT-40FMB is used with a GOT version earlier than listed above, the F9GT-40FMB data is written automatically to the GOT regardless of the switch position. The screen showing the direction of information flow is not displayed.
- Not available in the F920GOT-K-E, F930GOT-E or Handy GOT

2. F9GT-40FMB Specifications

Note;
- Do not conductive mount the F9GT-40FMB in an environment that contains dust, soot, corrosive or conducive dust, corrosive or flammable gas, or expose the unit to high temperatures, dew condensation, direct sunlight, rain and wind, or impact and vibration. If the F9GT-40FMB is used in such a place, electrical shock, fire, malfunction, damages or deterioration may occur.
- Make sure the power is Off before securely connecting the GOT and F9GT-40FMB. Poor connection may cause malfunction.

2.1 General Specifications

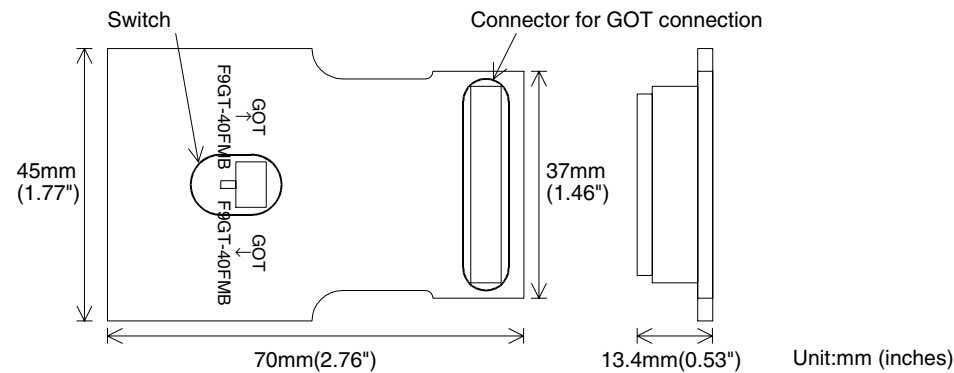| Item	Specifications
Temperature	Use: 0 to 40°C (32 to 104°F) Storage: -20 to 60°C (-4 to 140°F)
Humidity	Use: 35 to 85%RH (No condensation)
Working atmosphere	Must be free of lamp black, corrosive gas, flammable gas, or excessive amount of electroconductive dust particles and must be no direct sunlight. (Same as for saving)

2.2 Power Supply Specifications

Item	Specifications
Power supply voltage	5V DC ±5% (supplied from the GOT)
Current consumption	80mA

2.3 Performance specification

Item	Specifications
User memory	Flash memory 1MB

2.4 Outside Dimension

Switch   Connector for GOT connection

45mm (1.77")   37mm (1.46")

70mm(2.76")   13.4mm(0.53")   Unit:mm (inches)

- Switch
  The direction to forward the screen data is selected.
  Direction of forwarding: F9GT-40FMB→GOT or GOT→F9GT-40FMB
- Connector for GOT connection
  The connector for the GOT is attached to the enhancing interface port in the back of GOT.
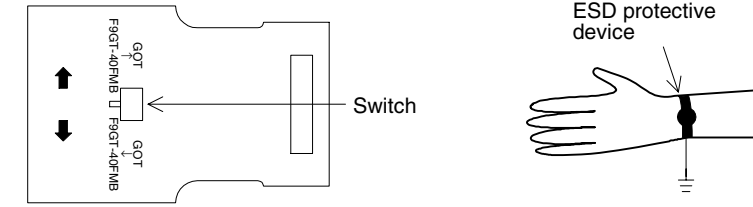
3. Operation Method

Note;
- Attach the F9GT-40FMB when the GOT power supply is OFF or data may be lost.
- Operate the F9GT-40FMB only after ESD precautions have been taken or data may be lost.
- Operate the touch switch of GOT by hand. Please take care to avoid using hard or sharp tipped objects or excessive force when pressing the touch Keys. Damage to the screen may occur.
- Do not turn off the power supply of GOT during data transfer or data may be lost.

1) Choose the transfer direction (F9GT-40FMB → GOT or GOT → F9GT-40FMB) using the switch on the F9GT-40FMB
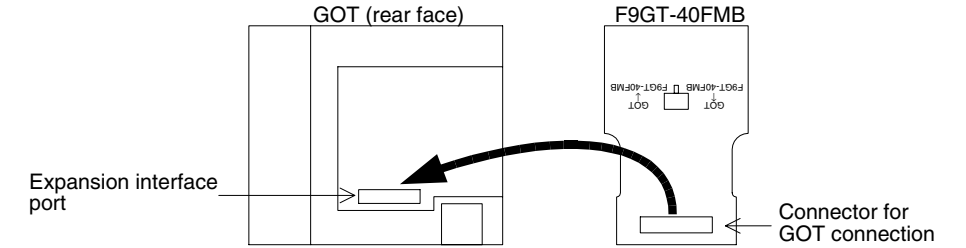
Note;
- When F9GT-40FMB is used with a GOT version earlier than the applicable version, the F9GT-40FMB data is written automatically to the GOT regardless of the switch position.

ESD protective device

Switch

2) After making sure the power of the GOT is OFF, connect the F9GT-40FMB to the expansion interface on the rear face of the GOT.

GOT (rear face)   F9GT-40FMB

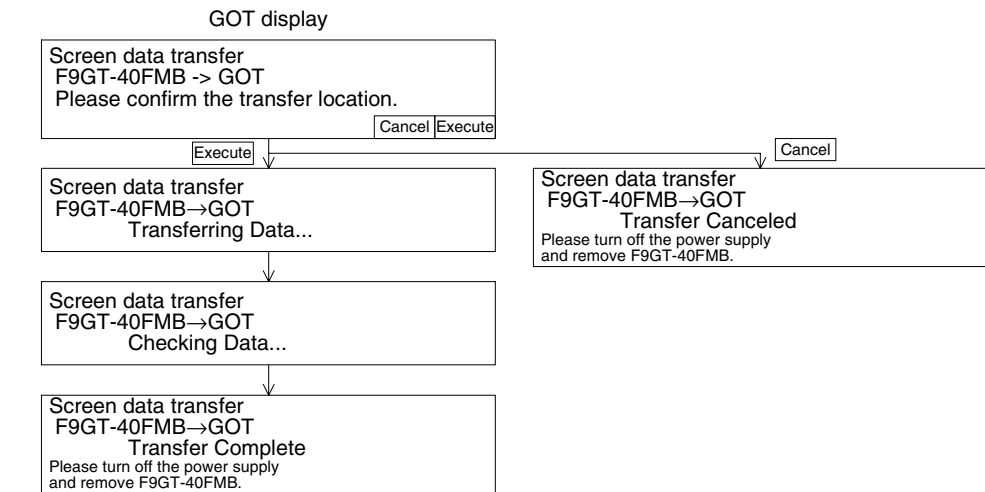Expansion interface port   Connector for GOT connection

3) Turn the power ON. A transfer screen is automatically displayed according to the switch state.
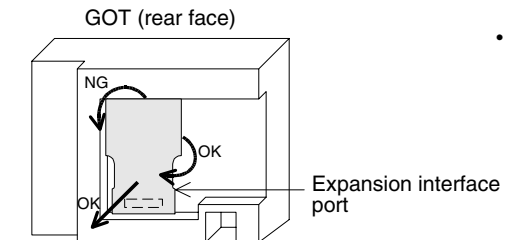
Note;
- When F9GT-40FMB is used with a GOT version earlier than the applicable version, the screen showing the direction of information flow is not displayed.

Pressing The Execute Key begins the transfer.(transfer and collation)
Pressing The Cancel Key cancels the transfer.

GOT display

Screen data transfer
F9GT-40FMB -> GOT
Please confirm the transfer location.

Screen data transfer
F9GT-40FMB→GOT
Transferring Data...

Screen data transfer
F9GT-40FMB→GOT
Transfer Canceled
Please turn off the power supply and remove F9GT-40FMB.

Screen data transfer
F9GT-40FMB→GOT
Checking Data...

Screen data transfer
F9GT-40FMB→GOT
Transfer Complete
Please turn off the power supply and remove F9GT-40FMB.

4) When the transfer is completed, turn off the power and detach the F9GT-40FMB.

GOT (rear face)

- Detach by pulling or the side of the F9GT-40FMB or by removing directly upward. Pulling the top of the F9GT-40FMB may cause damage to the GOT's expansion interface port.

Expansion interface port

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 the detailed warranty, refer to the GOT-F900 Series HARDWARE MANUAL [CONNECTION].

Manual number	: JY992D98601
Manual revision	: D
Date	: Sep. 2008

MITSUBISHI ELECTRIC CORPORATION