



**MITSUBISHI  
ELECTRIC**

Mitsubishi Graphic Operation Terminal

GRAPHIC OPERATION TERMINAL

**GOT1000**

*Changes for the Better*

**UPGRADE NEWS**

The best solutions for your industry needs.

An innovative and highly perfected platform -- the GOT1000 Series.

*Est*



Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO14001 (standards for environmental management systems) and ISO9001 (standards for quality assurance management systems)



## Various new functions for flexible use.

**Additional CF card unit on the GOT main unit.  
Increased functionality of the expansion drive.**

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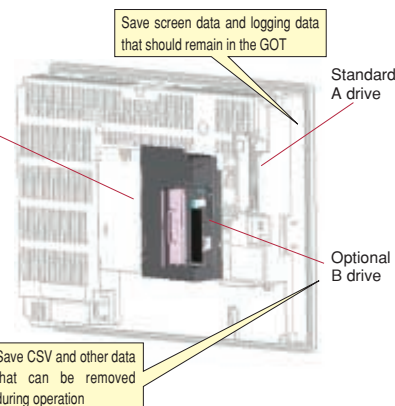
**GT  
15**

### CF card unit

- The standard CF card interface unit (A drive) and optional CF card interface unit (B drive) can be used for separate purposes. By adding a new optional interface operation safety is ensured by avoiding removal of necessary data which should always be stored in the GOT.

Product name	Model name
CF card interface unit	GT15-CFCD

CF card interface unit  
(GT15-CFCD)



**Expanded connectable FA equipment.  
Now it's easier to connect than ever.**

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### Enhanced connectivity

#### Other brand PLCs [GT15/GT11]

- Expanded manufacturers and models of PLCs.
  - Fuji Electric FA Components & Systems: MICREX-F series (F55/70/120S/140S/15□S)
  - Hitachi: S10V series (LQP510/520), S10mini series (LQP800/000/010/011/120)

#### Temperature controllers [GT15/GT11]

- Expanded manufacturers and models of temperature controllers
  - Shinko Technos digital indicating controllers: ACS-13A series, JC series, JCM-33A series, JIR-301-M series, FCD-100 series, FCR-100 series, FCR-23A series, FIR series, PC-900 series, DCL-33A series
  - Yokogawa Electric temperature controllers: GREEN series (UT/UP/UM/US), UT100 series (UT/UP), UT2000 series

#### Other

##### [GT15]

- By setting the network ID, stations in other networks (Ethernet, MELSECNET/H) can be monitored.

\*For more details on connectable models and connection configurations, refer to the GOT1000 Series Connection Manual.

**Enhanced functionality of SoftGOT1000.  
More flexibility in system architecture.**

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MELSOFT **GT SoftGOT1000** Version2

### Multiple Instances

- Multiple instances of GT SoftGOT1000 can run on a single personal computer, allowing monitoring of multiple devices from various connection configurations.

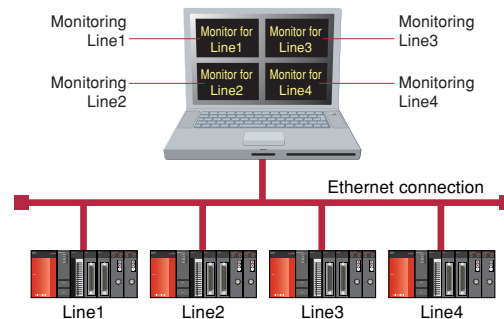
### Internal device interface functions

- By using internal device interface functions, user-created applications can read/write data from/to the GOT internal devices. In addition, it is possible to link data to user applications such as a data logger in order to develop advanced systems that can run in cooperation with applications.

<Development environment of user applications>

Microsoft(R) Visual C++(Version 6.0), Microsoft(R) Visual Basic (Version 6.0)

<Run multiple programs> GT SoftGOT1000 personal computer



#### [Benefit]

Multiple devices can be monitored from a single personal computer.

## Latest developments and functions of GOT1000

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### Crystal clear display, easy-to-create screens.

#### More flexibility in creating screens: Stroke font

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- A smooth curve remains after enlarging/reducing size of characters. Font size can be adjusted freely in 1 dot increments to display clear and elegant characters.

Standard font

Stroke font

GOT → GOT



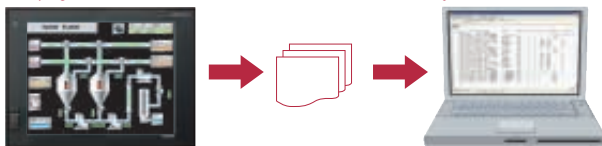
#### Easy check and analysis of resource data: CSV/Unicode text file conversion

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- Binary files of resource data can be converted into CSV or Unicode format text files by external control using a trigger device.

<Supported resource data> Advanced alarm log file, advanced recipe data file, operation log file

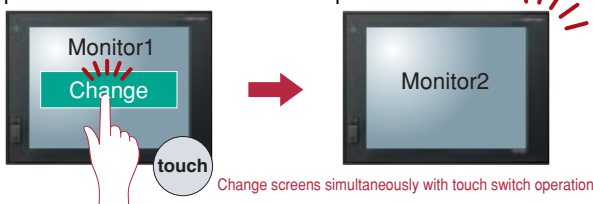
- ① Turn on conversion trigger using the PLC program or touch switch
- ② Convert BIN file into CSV/Unicode text file
- ③ Check data on a personal computer which GT Designer2 is not installed



Using the Gateway FTP function enables you to check alarms and other information with a personal computer, on which GT Designer2 is not installed, at remote locations.

#### Complete conversion of GOT-F900 series data: Enhanced functionality including F900 compatible functions (ex. Synchronized screen change)

- Changing screens is now synchronized with touch switch operations. Increased comfort of operation.

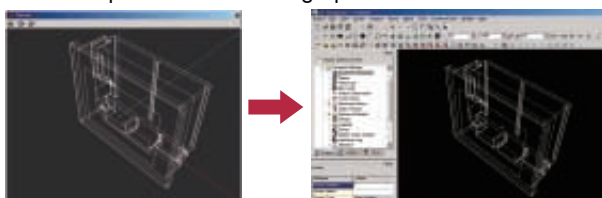


- Auto-repeat function that runs on specified intervals.

#### Enlarge and turn around CAD data in dedicated screen: 3D CAD data processing

GT Designer2

- Read and paste IGES format graphic data onto a screen.



Adjust the angle and size of the CAD data in the dedicated preview screen, then paste on a screen.

#### Easy-to-create language switching screen: Comment groups for switch and lamp label

- Comment groups can be used to display label names on touch switches and lamps.

<Supported objects> Touch switch, lamp



Display in Japanese



Display in English



Display in Chinese

Touch switches and lamps now support comment groups, which are very useful for language switching.

#### No need to adjust character string length: Automatic length adjustment of comment group labels

- Automatically adjusts character size and inserts line feeds according to the object size.

<Supported objects> • Touch switch or lamp where comment group is selected for labels  
• Comment display where comment group is used



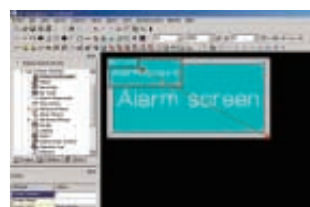
When switching languages, character string length is automatically adjusted to fit in the object.

#### Convenient when converting different screen size data: Automatic size adjustment of direct input characters

GT Designer2

- When changing the object size, directly entered characters are automatically adjusted according to the object size.

<Supported objects> Touch switch, lamp



Changing the object size will automatically change the text size of the label.

#### Selecting screens from thumbnail list improves your work efficiency: Screen image list

GT Designer2

- Screen image list displays all base screens and window screens. You can copy or delete screens and change the number of screens. Double-click on a thumbnail image to edit the screen.



Just drag and drop. Easy screen selection for Set Overlay Screen.

## New functions in the GOT1000 can greatly reduce downtime! Quick and easy diagnosis of unexpected problems encountered in operation.

**GT15**

### GOT Ladder Monitor Function is greatly improved with One-Touch Ladder Jump Function

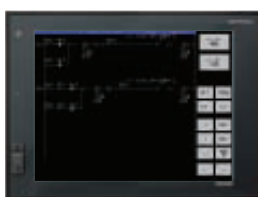
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#### One-Touch Ladder Jump Function (Q, QnA series) <NEW>

New Touch Switch Object is now available to display the ladder monitor screen of a set PLC program name and coil number. By using this switch, users can jump to the Ladder Monitor Screen and display the ladder block of the preset coil.



One touch to jump to Ladder Monitor Screen



Display the ladder block of the coil set to the touch switch

\*Ladder Monitor Function is supported by GT15 series XGA/SVGA/VGA models. Not only can the function be used in bus and CPU direct connection but also in Ethernet and MELSECNET/H connection. For more details on the Ladder Monitor Function, refer to the GOT1000 Series Extended/Option Functions Manual.

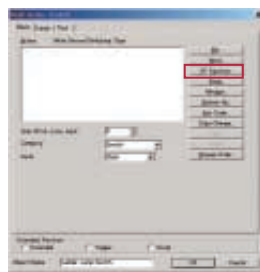
#### One-Touch Ladder Jump Function features

- For the touch switch object, users can set the Q/QnA series PLC station No., CPU No. (Q series only), program name, and coil No. The touch switch will then display the corresponding ladder blocks within the multiple programs connected to the GOT; contained in connected PLCs, other station PLCs, and multiple CPUs.

\*Local devices will be supported soon.

#### How to use One-Touch Ladder Jump Function

- Select [SP Function]-[Ladder Monitor] from the touch switch property dialog.



Set PLC station No., CPU No., destination device, ladder search mode (coil search/factor search), and program file name.  
(Example) [Program name: AUTO-L1, Network No.: 2, Station No.: 3, M100]



## Recommended usage of One-Touch Ladder Jump Function

Improve productivity and reduce downtime - these are common issues in the manufacturing industry. The One-Touch Ladder Jump Function can help users a great deal by reducing downtime after problems caused by equipment breakdown or halt in the operation.

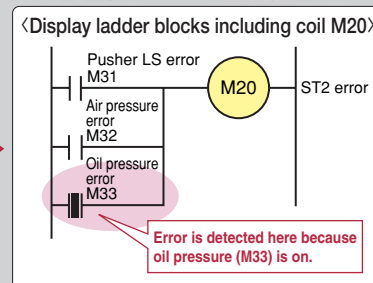
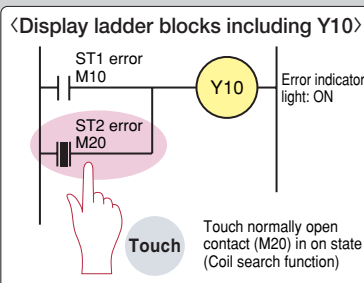
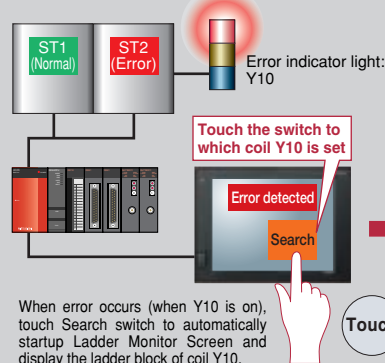
### 1 Investigate the problem cause at the production site ← Root cause investigator

#### When a problem occurs, on-site operators can proceed initial troubleshooting steps.

When an error is detected, touch switch operations can search and display the problem cause.

**[Benefit]** Greatly reduced numbers of touch switch operation steps can reduce downtime of the system. Using PLC error detection programs for other devices makes it easy to add error detection programs for existing devices. (No need for users to develop new search programs and screens)

<Error occurred in ST2 device!>



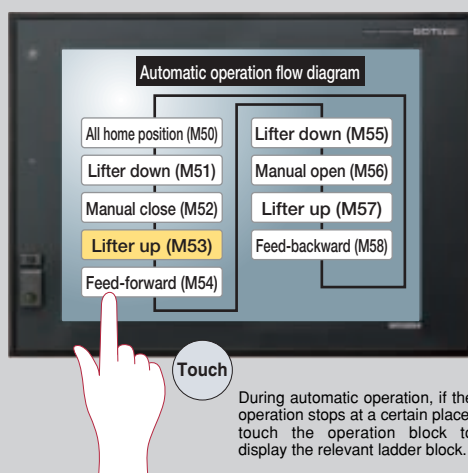


## 2 Restore the system as soon as possible ← Operation guard

### Operation halts due to unknown reasons at an unknown location.

Using the One-Touch Ladder Jump Function in combination with operation flow diagrams helps you quickly search the problems cause.

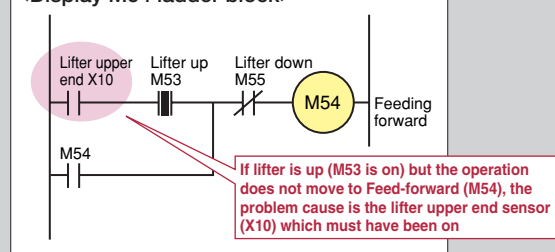
**[Benefit]** During automatic operation, the process may stop without any warning alarms (e.g. sensor positioning error). When this occurs, just touch the operation flow diagram which will show you the root cause of the problem. Since there is no need to use personal computers or ladder programs, the downtime of the system is reduced.



#### <How to draw the flow diagram screen>

- (1) Draw the screen for the automatic operation flow diagram. (to the left)
- (2) Set internal devices in the PLC automatic operation circuit (M50 to M58) to the touch switches of each operation block.

#### <Display M54 ladder block>

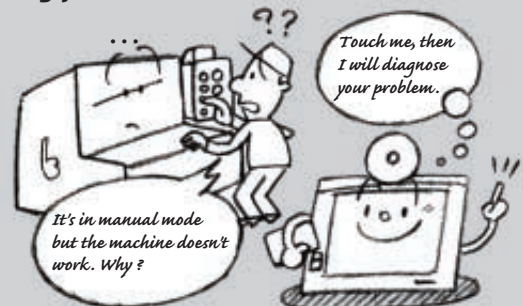
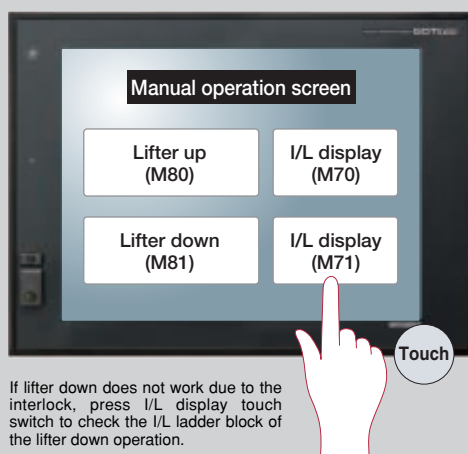


## 3 Find out the cause of the problem ← Interlock doctor

### The machine needs to be moved manually, but it does not work.

Just touch the screen to display the interlock status while in manual operation mode.

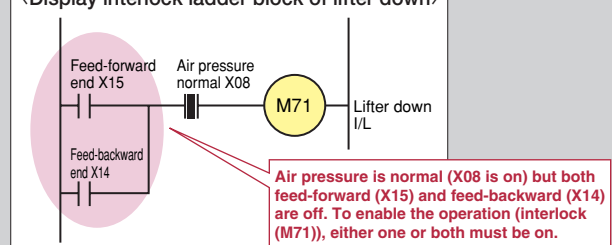
**[Benefit]** When manually restoring the system after tooling change or emergency stop, just press a switch to check the interlock status. This also reduces the downtime.



#### <How to draw manual operation screen>

- (1) Put "I/L display" switch next to the operation switch on the manual operation screen. (to the left)
- (2) Set internal devices for interlock of the relevant operation (M70, M71) to the I/L display switch.

#### <Display interlock ladder block of lifter down>



# Mitsubishi Graphic Operation Terminal

## Precautions for Choosing Products

This catalog explains the typical features and functions of the GOTs and does not provide restrictions and other information on usage and module combinations. When choosing the products, always check the detailed specifications, restrictions, etc. of the products in the user's manuals. When using the products, always read the user's manuals of the products.

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage 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

- To use the products given in this catalog properly, always read the "manuals" before starting to use them.
- 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.
- 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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