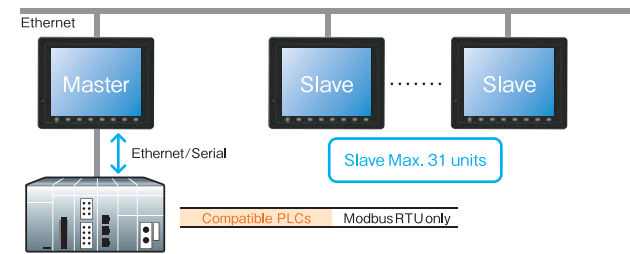## ≫ Multi-link 2 via Ethernet
Additional functions

Multi-link 2 connection is now possible by Ethernet connection. When connecting one PLC and several V8 series units, communication is now possible at higher speed.

Complying model ▸ V8

Ethernet

| Master | Slave | ······· | Slave |

Ethernet/Serial

Slave Max. 31 units

Compatible PLCs　Modbus RTU only

≫ Conditional Visibility of Trend Sampling Data
Additional functions

Waveform shown in trend sampling can be selected whether to display or not to display.
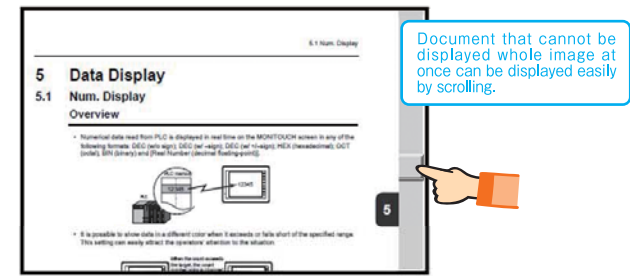
Complying model ▸ V8

Screen can be shared by selecting the displayed waveform to fit with the specification of the device.

≫ Scroll Bar
First in industry
Additional functions

Desired items can be found by scrolling down the screen. JPEG files can be displayed and checked easily.

Complying model ▸ V8

5 Data Display
5.1 Num. Display
Overview

Document that cannot be displayed whole image at once can be displayed easily by scrolling.

≫ Slider Switch
First in industry
Additional functions

The operation that was available only by direct numeric entry is now controllable intuitively by slider switch. For example, setting of the target value of graph can be adjusted easily by this slider switch.
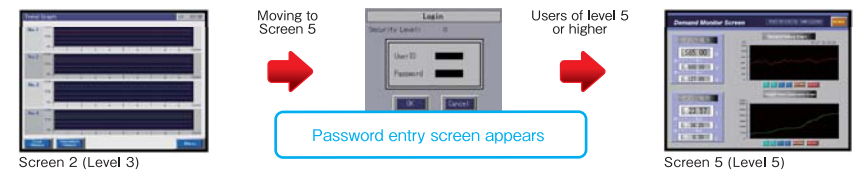
Complying model ▸ V8

The max./min. values can be set within the switch range for easy value entry.

≫ Function Security
Additional functions

There are 15 levels of security to choose from, according to the level of the user. This function ensures a high level of security for the system.

Complying model ▸ V8

Moving to Screen 5

Users of level 5 or higher

Password entry screen appears

Screen 2 (Level 3)

Screen 5 (Level 5)

● Interlocking of switches
It is possible to set the security level for switches. Only users who are allowed to use a switch can operate it.

≫ Addition of Macro Commands
Additional functions

● Mathematic /Trigonometric Function Macro
Complying model ▸ V8

Commands for trigonometric function such as sine, cosine and tangent, absolute value, and sign inversion are now available.

● Control Statement Macro
Complying model ▸ V8

IF-ELSE statements are available. Statement of macro command for comparison became now shorter and easier.

Great popularity Other functions

≫ **Component parts**　Easy screen configuration with prepared parts

≫ **Pop-up message**　Registered common dialogs such as alerts shorten the programming process.

≫ **MES interface**　Information from production sites is transferred to the host PC via V8 through LAN, enabling easy plant management.

V-SFT Ver.5 supports V8 series in screen configuration and updating.

◎Hakko Electronics Website
www.monitouch.com
Our website includes FAQs for answering your questions and solving problems related to MONITOUCH, users' manuals, sample screens and downloading of configuration software for updating.

Fe e-Front runners

Easy, simple configuration

MONITOUCH
V-SFT
Ver.5 V8 series

Upgraded from V8 series
Improved maintenance and configuration functions
Applications with new functions

Hakko Electronics Co.,Ltd.
www.monitouch.com

890-1 Kamikashiwano-machi, Hakusan, Ishikawa 924-0035, Japan
Hakko Electronics Development Center
Tel.+81-76-274-2144 Fax.+81-76-274-5208

Improved operation and maintenance efficiency with simple, easy-to-understand screens

Improved V-SFT, speedy configuration and debugging improve operation efficiency,
and easy-to-see displays of detailed information facilitate maintenance at production sites.

» Additional Alarm Functions
Easy Maintenance

When a trouble occurs, an alarm message with a description of the parameters is displayed. For instance, when the water temperature exceeds 40°C, not only "CAUTION" but also the detailed message of "Caution: Exceeding 40°C" is displayed to facilitate trouble analysis.

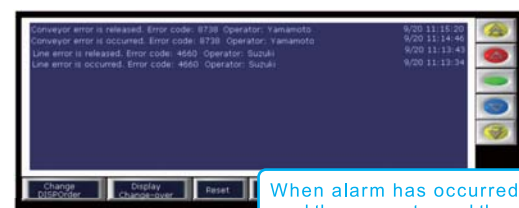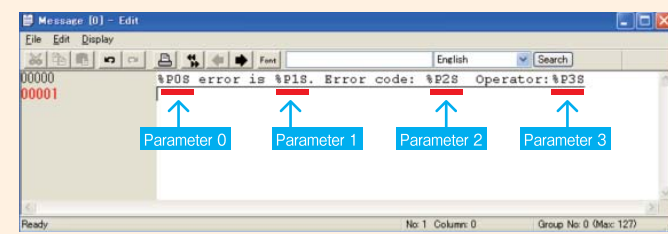Complying model **V8**

Setting Procedure

● Parameter Table
Register the parameter (up to 8 parameters) associated with each alarm.

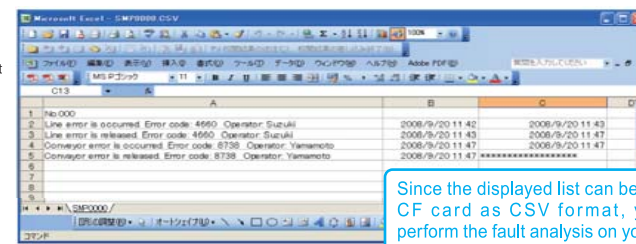| No.	Memory	Type
0	D4	Message No.
1	M0	Bit
2	D5	Numerical value (one word)
3	D6	Characters (8 characters)
·	·	·
·	·	·
·	·	·

● Message Editing
Define the registered parameter numbers while editing the message. When the message is displayed, the established memory will be loaded, and the established display will be performed subsequently.

Parameter 0   Parameter 1   Parameter 2   Parameter 3

CSV file output

When alarm has occurred, it will read the parameter and then display the message reflecting the content.
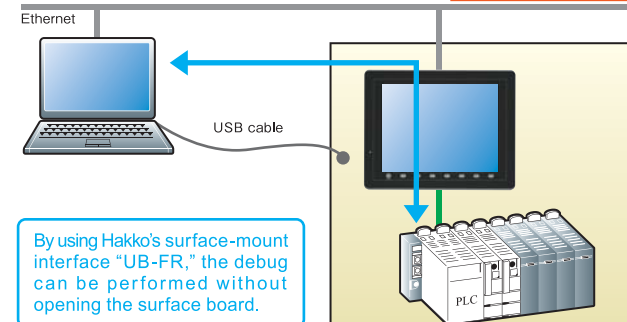
Since the displayed list can be saved in CF card as CSV format, you can perform the fault analysis on your PC.

» PLC Ladder Program Transfer
Easy Maintenance

Inputting the ladder program from the PC or monitoring can be performed through the USB port equipped with V8 or Ethernet.

Complying model **V8**

Ethernet

USB cable

By using Hakko's surface-mount interface "UB-FR," the debug can be performed without opening the surface board.

PLC

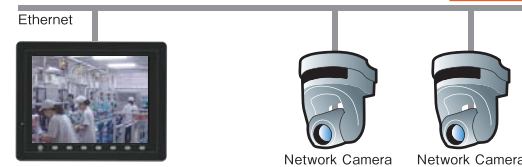| Complying model	V8 Series
Complying PLC	Mitsubishi QnH(Q) Series CPU, Q00J/00/01 CPU, QnU Series CPU, QnH(Q) Series (Multi CPU) Fuji MICREX-SX SPH/SPB CPU

» Network Camera
First in industry *Easy Maintenance*

Images from the network camera connected on the network can be played on V8. It is effective to monitor the remote location or the overall production line.

Complying model **V8**

Ethernet

Network Camera   Network Camera

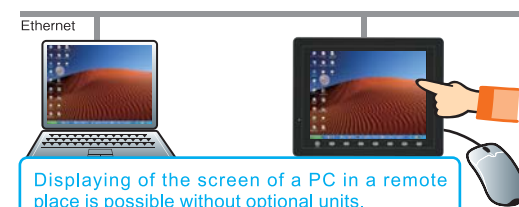| Complying model	V8i Series
Connection verified model	AXIS 214PTZ

Camera images can be displayed only with V8 itself without using any optional units.

» Remote PC Connection
Easy Maintenance

Display of server PC can be also displayed on V8 directly only by connecting on the Ethernet. You are able to check the operating procedure and the instruction manual saved in the PC, which is located at the office, and it helps you to reduce the errors.

Complying model **V8 ※**

Ethernet

Displaying of the screen of a PC in a remote place is possible without optional units.

The screen is operated by touching the panel, or using a mouse or a USB keyboard connected to MONITOUCH.

Convenient

● PC application software can be displayed.
PDF   WORD   EXCEL

As you can display PDF, WORD, EXCEL files on Monitouch; for example, it helps you to check the instruction manual of the device easily.

※A license for the use of PC applications is necessary.
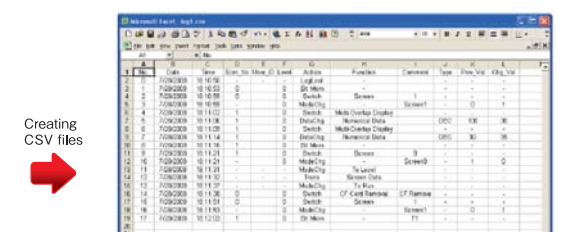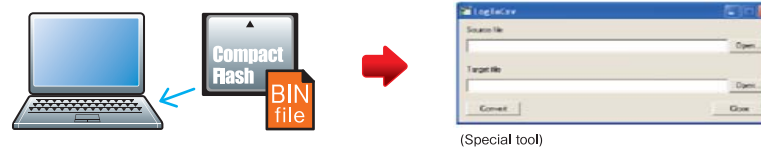
» Operation Log
Easy Maintenance

Referring to the operation history will surely lead to analyze the causes of the error. The operation history such as for push-button switches or numeric entry will be recorded in chronological order. By combining with the password function, you can refer to the operation history such as who the operator was, when the operation was performed, what kind of operation it was, and how the operation was conducted.

Complying model **V8**

Items	Timing to save
Start-up	At the time power is supplied.
Transfer	At the time of transferring the screen program or I/F driver.
Mode switching	At the time of switching RUN screen and Main Menu screen.
Screen switching	At the time of switching the screen.
Language switching	At the time of switching the language.
Switch operation	At the time switch is pressed.
Data display renewal	At the time number display/character display are renewed by entry mode.
Log elimination	At the time SRAM data is cleared and the log is newly saved.

*Table Data Display is not supported.

Referring to the log

Operation log will be saved as BIN file. No need to worry about the falsification of data.

Note: Display function of operation log on the unit will be supported in winter 2009.

● Conversion to CSV Files
BIN file that includes the operation history saved in CF card can be converted to CSV file using the dedicated tool.
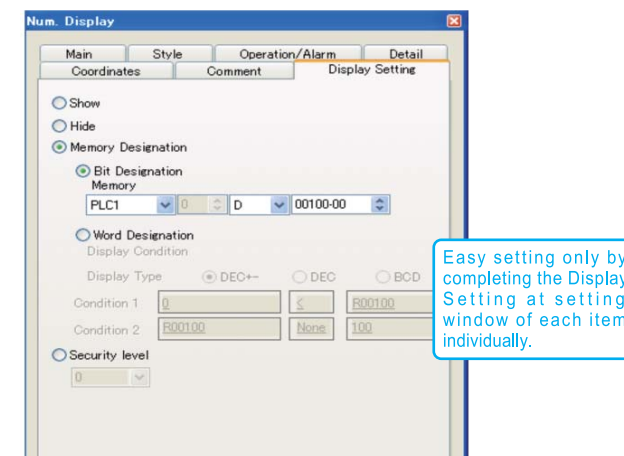
BIN file

(Special tool)

Creating CSV files

» Conditional Visibility
Improved functions

Conditional visibility is available in various display preferences suited to the situation.

Complying model **V8**

● Static conditional visibility
Conditional visibility can be set item by item on the configuration software, V-SFT. One base screen can be utilized for various applications depending on the occasion.

Easy setting only by completing the Display Setting at setting window of each item individually.

● Dynamic conditional visibility
Complying model **V8**

Display status of the item can be changed depending on the state of memory.For example, only necessary switches can be indicated to prevent operation by mistake. Safe and secure operation is made possible by indicating the procedure to follow.

● When memory is set to M100

Displayed

M100=OFF   M100=ON

● Conditional visibility according to security levels
Only the item, which has less security level than the one logged in the password function, can be displayed.

Security level 14 or lower   Security level 15

Displayed

You can prevent the false operation of the exclusive items for the administrator by setting higher security level so that the operators other than the administrator won't see that item.

» Increase in Number of Screens
Improved functions

Configurable maximum screen no. was expanded to 9,999. 4,000pcs of the screen can be registered in the unit. Since CF cards can be used as an extension unit for saving screens, you can design the screen free from worries about data capacity.

Complying model **V8**

Past: 1,024

New version: 4,000

Four times

» V806 Vertical Installation
Improved functions

Selecting the vertical mode enables data to be edited on the vertical screen of the V806 Series.

Complying model **V806**

*Available for color model only.

Convenient for a small space