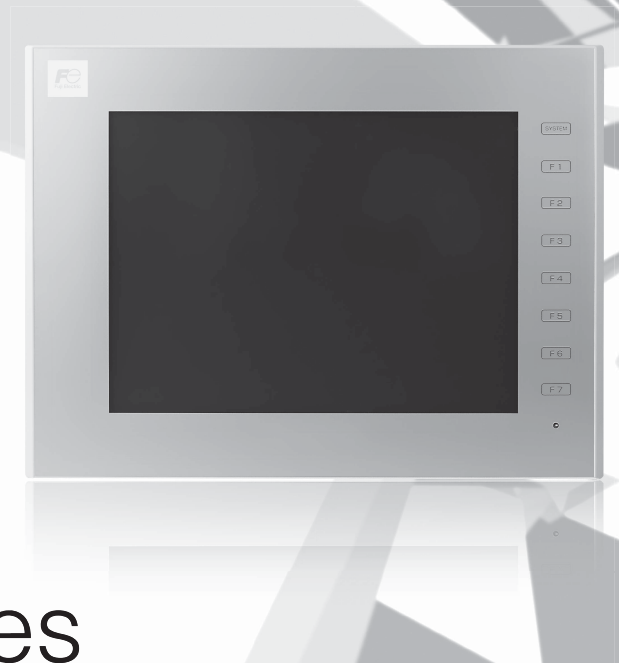**Fe Fuji Electric**

# MONITOUCH

## Troubleshooting / Maintenance Manual

# V9 series

## Record of Revisions

Reference numbers are shown at the bottom left corner on the back cover of each manual.

| Printing Date | Reference No. | Revised Contents |
|---|---|---|
| June, 2014 | 1068NE0 | First edition |
| December, 2014 | 1068NE1 | Second edition<br>[Partial modifications]<br>• Revised note regarding when the screen becomes dark in "Notes on Safe Usage of MONITOUCH"<br>• Revisions for new print<br>[Additions]<br>• Notes regarding capacitive touch panels in "Notes on Safe Usage of MONITOUCH"<br>• Contents regarding Advanced models, VPN, Multi-link and Multi-link2 |
| August, 2018 | 1068NE2 | Third edition<br>[Partial modifications]<br>• Revised front and back covers<br>• Revisions for new print<br>[Additions]<br>• Data transfer viewer, video player, and PDF viewer added to system menu<br>• Menus and tab windows added to the Local mode screen |
|  |  |  |

# Preface

Thank you for selecting the MONITOUCH V9 series.
This manual describes operation procedures and errors of the V9 series in detail.
For correct use of the V9 series, you are requested to read through this manual to understand more about the product.
The manuals shown below are related manuals for the V9 series. Refer to them as necessary.

| Manual Name | Contents | Reference No. |
|---|---|---|
| V9 Series Reference Manual [1] | Explains the functions and operation of the V9 series. | 1065NE |
| V9 Series Reference Manual [2] | | 1066NE |
| V9 Series Setup Manual | Explains the installation procedure of V-SFT version 6, the creation process of simple screen programs as well as how to transfer a created screen program using V-SFT version 6. | 1067NE |
| V9 Series Training Manual Beginner's Guide | Explains the screen creation process using V-SFT version 6 with examples in detail. | 1069NE |
| V9 Series Training Manual Practical Guide | | 1070NE |
| V9 Series Macro Reference | Provides an overview of macros of V-SFT version 6 and explains macro editor operations and macro command descriptions in detail. | 1071NE |
| V9 Series Operation Manual | Explains the configuration of V-SFT version 6, the editing process of each part and limitations regarding operation in detail. | 1072NE |
| V9 Series Hardware Specifications | Explains the handling procedures and hardware specifications of the V9 series. | 2023NE |
| V9 Series Connection Manual [1] | Explains the connection and communication parameters for the V9 series and controllers in detail. | 2210NE |
| V9 Series Connection Manual [2] | | 2211NE |
| V9 Series Connection Manual [3] | | 2212NE |

For further details about controllers (PLCs, temperature controllers, etc.), refer to the manual issued by each controller manufacturer.

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# Types and Model Names of the V9 Series

The MONITOUCH V9 series comprises the following types.

| General Name | Model Classification | Model |
|---|---|---|
| V9 series | Advanced model | V910xiW, V907xiW |
| | Standard model | V9150iX, V9120iS, V9100iS, V9080iSD |
| | Lite model | V9100iC, V9080iCD, V9060iTD |

| General Name | Model Classification | Model |
|---|---|---|
| V9 series | Additional wired LAN I/F model | V9 model name with "L" added<br>Example: V9101iWLD |
| | Wireless LAN I/F model | V9 model name with "R" added<br>Example: V9101iWRLD |

Note that model names are differentiated according to the above descriptions in this manual for operation explanations.

# Notes on Safe Usage of MONITOUCH

In this manual, you will find various notes categorized under the following levels with the signal words "DANGER" and "CAUTION".

| ⚠ **DANGER** | Indicates an <u>imminently hazardous situation which, if not avoided, will result in death or serious injury</u>. |
|---|---|

| ⚠ **CAUTION** | Indicates a <u>potentially hazardous situation which, if not avoided, may result in minor or moderate injury and could cause property damage</u>. |
|---|---|

Note that there is a possibility that items listed with ⚠ CAUTION may have serious ramifications.

---

## ⚠ DANGER

- Never use the output signal of the V9 series for operations that may threaten human life or damage the system, such as signals used in case of emergency. Please design the system so that it can cope with a touch switch malfunction. A touch switch malfunction may result in machine accidents or damage.
- Turn off the power supply when you set up the unit, connect new cables, or perform maintenance or inspections. Otherwise, electrical shock or damage may occur.
- Never touch any terminals while the power is on. Otherwise, electrical shock may occur.
- You must cover the terminals on the unit before turning the power on and operating the unit. Otherwise, electrical shock may occur.
- The liquid crystal in the LCD panel is a hazardous substance. If the LCD panel is damaged, do not ingest the leaked liquid crystal. If leaked liquid crystal makes contact with skin or clothing, wash it away with soap and water.
- Never disassemble, recharge, deform by pressure, short-circuit, reverse the polarity of the lithium battery, nor dispose of the lithium battery in fire. Failure to follow these conditions will lead to explosion or ignition.
- Never use a lithium battery that is deformed, leaking, or shows any other signs of abnormality. Failure to follow these conditions will lead to explosion or ignition.
- Switches on the screen are operable even when the screen has become dark due to a faulty backlight or when the backlight has reached the end of its service life. If the screen is dark and hard to see, do not touch the screen. Otherwise, a malfunction may occur resulting in machine accidents or damage.

---

## ⚠ CAUTION

- Check the appearance of the unit when it is unpacked. Do not use the unit if any damage or deformation is found. Failure to do so may lead to fire, damage, or malfunction.
- For use in a facility or as part of a system related to nuclear energy, aerospace, medical, traffic equipment, or mobile installations, please consult your local distributor.
- Operate (or store) the V9 series under the conditions indicated in this manual and related manuals. Failure to do so could cause fire, malfunction, physical damage, or deterioration.
- Observe the following environmental restrictions on use and storage of the unit. Otherwise, fire or damage to the unit may result.
  - Avoid locations where there is a possibility that water, corrosive gas, flammable gas, solvents, grinding fluids, or cutting oil can come into contact with the unit.
  - Avoid high temperatures, high humidity, and outside weather conditions, such as wind, rain, or direct sunlight.
  - Avoid locations where excessive dust, salt, and metallic particles are present.
  - Avoid installing the unit in a location where vibrations or physical shocks may be transmitted.

# ⚠️CAUTION

- Equipment must be correctly mounted so that the main terminal of the V9 series will not be touched inadvertently. Otherwise, an accident or electric shock may occur.
- Tighten the mounting screw on the fixtures of the V9 series to an equal torque of 5.31 lbf-in (0.6 N·m). Excessive tightening may distort the panel surface. Loose mounting screws may cause the unit to fall down, malfunction, or short-circuit.
- Check periodically that terminal screws on the power supply terminal block and fixtures are firmly tightened. Loosened screws or nuts may result in fire or malfunction.
- Tighten the terminal screws on the power supply terminal block of the V9 series to an equal torque of 7.1 to 8.8 lbf-in (0.8 to 1.0 N·m). Improper tightening of screws may result in fire, malfunction, or other serious trouble.
- The V9 series has a glass screen. Do not drop the unit or impart physical shocks to the unit. Otherwise, the screen may be damaged.
- Correctly connect cables to the terminals of the V9 series in accordance with the specified voltage and wattage. Overvoltage, overwattage, or incorrect cable connection could cause fire, malfunction, or damage to the unit.
- Always ground the V9 series. The FG terminal must be used exclusively for the V9 series with the level of grounding resistance less than 100 Ω. Otherwise, you may sustain an electric shock, a fire may occur, MONITOUCH may not recognize touch operations, and malfunctions may occur.
- Prevent any conductive particles from entering the V9 series. Failure to do so may lead to fire, damage, or malfunction.
- After wiring is finished, remove the paper used as a dust cover before starting operation of the V9 series. Operation with the dust cover attached may result in accidents, fire, malfunction, or other trouble.
- Do not attempt to repair the V9 series yourself. Contact Hakko Electronics or the designated contractor for repairs.
- Do not repair, disassemble, or modify the V9 series. Hakko Electronics Co., Ltd. is not responsible for any damages resulting from repair, disassembly, or modification of the unit that was performed by an unauthorized person.
- Do not use sharp-pointed tools to press touch switches. Doing so may damage the display unit.
- Only experts are authorized to set up the unit, connect cables, and perform maintenance and inspection.
- Lithium batteries contain combustible material such as lithium and organic solvents. Mishandling may cause heat, explosion, or ignition resulting in fire or injury. Read the related manuals carefully and correctly handle the lithium battery as instructed.
- Take safety precautions during operations such as changing settings when the unit is running, forced output, and starting and stopping the unit. Any misoperations may cause unexpected machine movement, resulting in machine accidents or damage.
- In facilities where the failure of the V9 series could lead to accidents that threaten human life or other serious damage, be sure that such facilities are equipped with adequate safeguards.
- When disposing of the V9 series, it must be treated as industrial waste.
- Before touching the V9 series, discharge static electricity from your body by touching grounded metal. Excessive static electricity may cause malfunction or trouble.
- Insert an SD card into MONITOUCH in the same orientation as pictured on the unit. Failure to do so may damage the SD card or the slot on the unit.
- The SD card access LED flashes red when the SD card is being accessed. Never remove the SD card or turn off power to the unit while the LED is flashing. Doing so may destroy the data on the SD card. Check that the LED has turned off before removing the SD card or turning off the power to the unit.
- Be sure to remove the protective sheet that is attached to the touch panel surface at delivery before use. Using MONITOUCH with the protective sheet attached may result in incorrect touch switch activation.
- When using an analog resistive-film type V9 series unit, do not touch two positions on the screen at the same time. If two or more positions are pressed at the same time, the switch located between the pressed positions may be activated.

## ⚠ CAUTION

- When using a V9 series unit of the capacitive type, observe the following points.
  - Use a Class 2 power supply for the 24 VDC power unit. Using MONITOUCH with an unstable power supply may result in incorrect touch switch activation.
  - Capacitive touch panel types support two-point touch operations. If a third point is touched, the touch operation will be cancelled.
  - Capacitive touch panel types are prone to the influence of conductive material. Do not place conductive material such as metals near the touch panel surface and do not use the panel if it is wet. Otherwise, malfunctions may occur.

[General Notes]

- Never bundle control cables or input/output cables with high-voltage and large-current carrying cables such as power supply cables. Keep control cables and input/output cables at least 200 mm away from high-voltage and large-current carrying cables. Otherwise, malfunction may occur due to noise.
- When using the V9 series in an environment where a source of high-frequency noise is present, it is recommended that the FG shielded cable (communication cable) be grounded at each end. However, when communication is unstable, select between grounding one or both ends, as permitted by the usage environment.
- Be sure to plug connectors and sockets of the V9 series in the correct orientation. Failure to do so may lead to damage or malfunction.
- If a LAN cable is inserted into the MJ1 or MJ2 connector, the device on the other end may be damaged. Check the connector names on the unit and insert cables into the correct connectors.
- Do not use thinners for cleaning because it may discolor the V9 series surface. Use commercially available alcohol.
- If a data receive error occurs when the V9 series unit and a counterpart unit (PLC, temperature controller, etc.) are started at the same time, read the manual of the counterpart unit to correctly resolve the error.
- Avoid discharging static electricity on the mounting panel of the V9 series. Static charge can damage the unit and cause malfunctions. Discharging static electricity on the mounting panel may cause malfunction to occur due to noise.
- Avoid prolonged display of any fixed pattern. Due to the characteristic of liquid crystal displays, an afterimage may occur. If prolonged display of a fixed pattern is expected, use the backlight's auto OFF function.
- The V9 series is identified as a class-A product in industrial environments. In the case of use in a domestic environment, the unit is likely to cause electromagnetic interference. Preventive measures should thereby be taken appropriately.
- The signal ground (SG) and frame ground (FG) are connected inside the V9150 series unit. Take care when designing systems.

[Notes on the LCD]
Note that the following conditions may occur under normal circumstances.
- The response time, brightness, and colors of the V9 series may be affected by the ambient temperature.
- Tiny spots (dark or luminescent) may appear on the display due to the characteristics of liquid crystal.
- There are variations in brightness and color between units.

[Notes on Capacitive Touch Panels]
- Touch panel operability may not be optimal if used with dry fingers or skin. In such a case, use a capacitive stylus pen.
- Periodically clean the touch panel surface for optimum touch operations.
  When cleaning, take note of the following points.
  <When cleaning>
  - The panel surface is made of glass. Be sure to clean the surface gently with a cloth or sponge. Otherwise, you may scratch or damage the glass.
  - Take care not to let cleaning detergent to seep into the touch panel unit.
    Do not directly apply or spray cleaning detergent on the panel surface.

[Notes on Wireless LAN]
For details regarding supported wireless LAN standards, radio law certifications, and countries where wireless LAN can be used, refer to the "About Wireless LAN on V9 Advanced Model"/"About Wireless LAN on V9 Standard Model" manual or the "V9 Series Hardware Specifications" provided with the V9 series unit at delivery.

# Contents

Chapter 3    Error Handling

# 1

# MONITOUCH Operations

# 1.    Before Operation

## Procedure before Operation

1.  Mount and install the V9 series unit on the mounting panel, and carry out wiring.
    For details, refer to the V9 Series Hardware Specifications manual.

2.  Install peripheral equipment, such as PLCs and temperature controllers, and carry out wiring.
    For details on wiring and setting procedures, refer to the V9 Series Connection Manual.

3.  Turn on the power to the V9 series unit.

4.  If turning on the power to the V9 series unit for the first time, select an interface language for the unit.
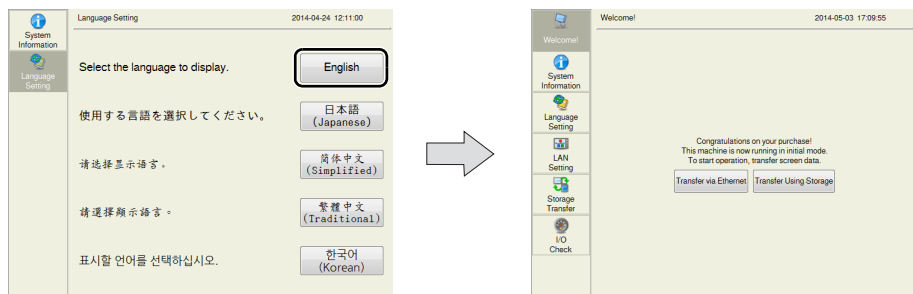


5.  Transfer the screen program created using the V-SFT editor.
    For details on screen program transfer, refer to page 1-2.

6.  Start operation.
    When the connection with controllers has been established, MONITOUCH enters RUN mode.

    *   If MONITOUCH does not operate normally and shows an error message, refer to Chapter 3 and eliminate the cause of the error.

**1**

MONITOUCH Operations

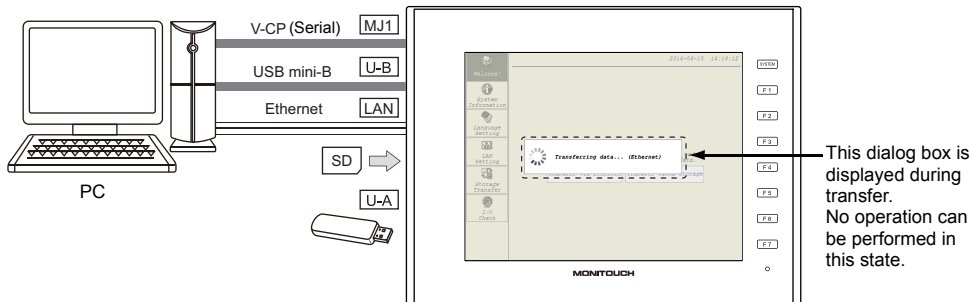# Screen Program Transfer

There are five methods for transferring a screen program as described below.

When a screen program is transferred for the first time:



This dialog box is displayed during transfer.
No operation can be performed in this state.

1) Serial transfer
   Connect a screen program transfer cable "V-CP" to the MJ1 port on the V9 series unit, and transfer the screen program from a PC.

2) Transfer via USB
   Connect a USB mini-B cable to the U-B port on the V9 series unit, and transfer the screen program from a PC.

3) Transfer via Ethernet
   Connect an Ethernet cable to the LAN port on the V9 series unit, and transfer the screen program from a PC.
   When turning on the power to MONITOUCH for the first time, the [Transfer via Ethernet] switch appears at the center of the screen. Pressing this switch displays the LAN Setting screen on which you can set the IP address of the V9 series unit.

   * For details on 1) to 3), refer to the V9 Series Operation Manual.

4) Transfer from storage
   Use a storage device, such as an SD card or a USB flash drive.
   Load a screen program from the PC into the storage device in advance. When turning on the power to MONITOUCH for the first time, the [Transfer Using Storage] switch appears at the center of the screen. Pressing this switch displays the Storage Transfer screen and you can transfer the screen program.

5) Transfer from storage (automatic upload)
   Load a screen program from the PC to the storage device, such as an SD card or a USB flash drive, in advance. When the power to MONITOUCH is turned on, screen program transfer automatically starts.

   * For more information on 4) and 5), refer to the V9 Series Reference Manual 2.

# 2. Function Switches (Only for Standard/Lite Models)

There are eight function switches provided.
[SYSTEM], [F1], [F2], [F3], [F4], [F5], [F6], [F7]

* Function switches are not provided on Advanced models.

## [SYSTEM] Switch

The [SYSTEM] switch is an alternate action switch.
When it is pressed once, the system menu appears at the top of the screen, and the status bar appears at the bottom right of the screen. [*]
For details on the system menu, refer to page 1-4. For the status bar, refer to page 1-16.

System menu
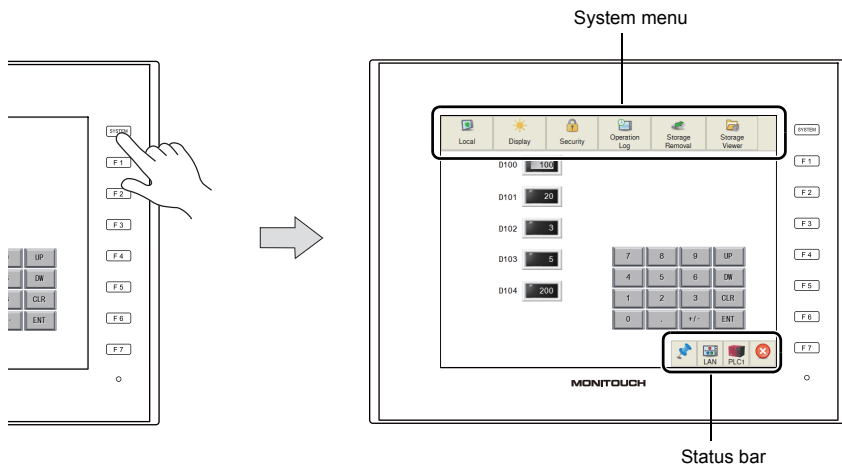


Status bar

* If the system menu and the status bar do not appear by pressing the [SYSTEM] switch, the [System Switch Prohibited] checkbox (page 1-6) was selected while editing the screen program on V-SFT version 6.
If the status bar does not appear by pressing the [SYSTEM] switch, the [Status Bar Prohibited] checkbox (page 1-22) was selected while editing the screen program on V-SFT version 6.

## [F1] to [F7] Switches

The function switches can be operated by the user when the V9 series unit is in RUN mode (in operation) [*1] and the system menu is not displayed by pressing the [SYSTEM] switch. [*2]
Function switches should be defined on V-SFT version 6.

- Making settings for individual screens
  [Screen Setting] → [Local Function Switch Setting]

- Making settings common to all screens [*3]
  [System Setting] → [Global Setting] → [Global Function Switch Setting]

*1 When the V9 series unit is in Local mode, the function switches do not work even if they are pressed.
*2 Function switches will become valid when the V9 series unit is in RUN mode and the [Operation Log] or [Storage Viewer] switch is selected from the system menu.
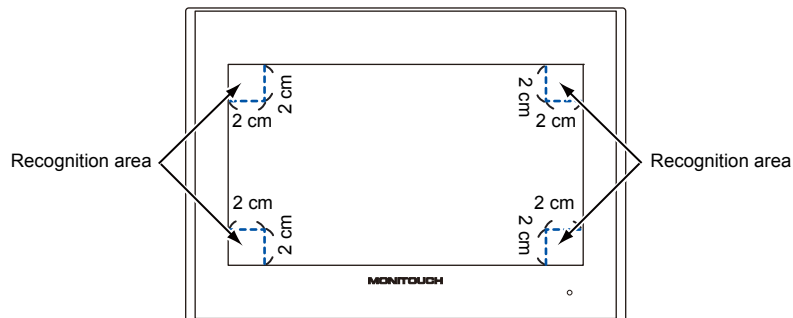*3 When a screen with [Local Function Switch Setting] set is displayed, settings configured in the [Local Function Switch Setting] window override those configured in the [Global Function Switch Setting] window.
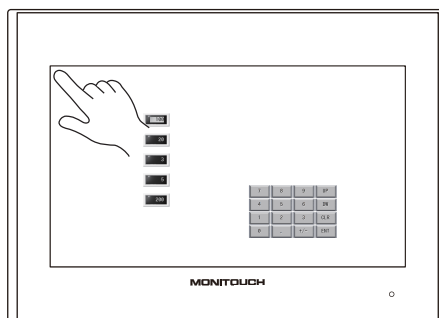
# 3.    System Menu

## Display Method

### Advanced Model

Press two of the four corners of the V9 series unit screen one by one to display the system menu.



1.  Press one corner of the screen for at least 2 seconds and release your finger when there is a beep.



Press the upper left corner for at least 2 seconds.

2.  Then within one second, press a different corner and hold for at least 2 seconds to display the system menu.
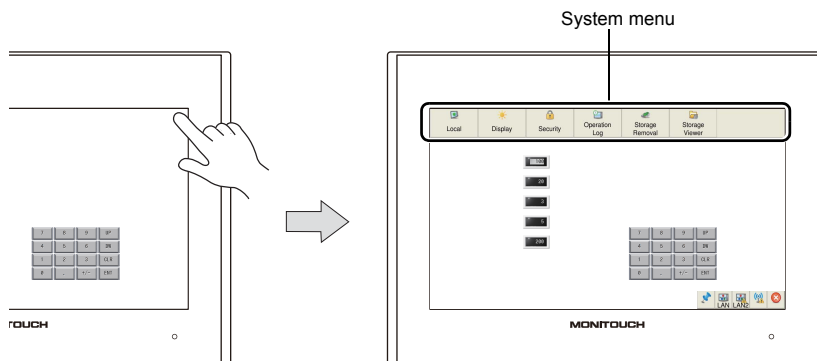


System menu

Press a different corner for at least 2 seconds.

*   If any of the items given below are placed in a corner on the screen, the system menu will not be displayed. Be sure to press a corner where none of the items are placed. If these items are placed in all four corners of the screen, switch the screen to one that has open corners and perform the above procedure to display the system menu.

    Switches, data display parts with switches, display areas, scrolling messages, slider switches, scroll bars, and table data display parts

**1**

MONITOUCH Operations

## Standard/Lite Models
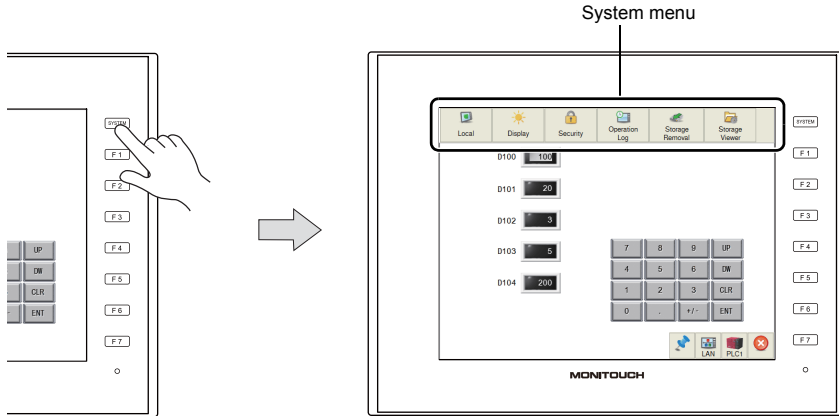
Press the [SYSTEM] switch. *

System menu



\*  If the system menu does not appear by pressing the [SYSTEM] switch, the [System Switch Prohibited] checkbox
(page 1-6) was selected while editing the screen program on V-SFT version 6.

# System Menu Types

There are two types of system menus as shown below:

System menu in RUN mode



System menu in Local mode



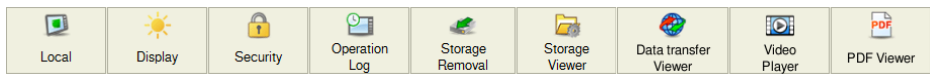| Item | Description |
|---|---|
| Local / RUN | Switches the operation mode between RUN and Local. |
| Display | Used for brightness adjustment and backlight control of the V9 series unit.<br>For details on the operating procedure, refer to page 1-7. |
| Security | Displayed only when [Use security function] is selected at [System Setting] → [Other] → [Security Setting] using V-SFT version 6.<br>For details on the operating procedure, refer to page 1-8.<br>  *  For details on the security function, refer to the V9 Series Reference Manual 2. |
| Operation Log | Displayed only when [Use operation log function] is selected at [System Setting] → [Other] → [Operation log Setting] using V-SFT version 6.<br>This is used for displaying the operation log viewer.<br>  *  For details on the operation log function and operation log viewer, refer to the V9 Series Reference Manual 2. |
| Storage Removal | Used for stopping access to a connected storage device and reconnecting to a storage device.<br>For details on the operating procedure, refer to page 1-14. |
| Storage Viewer | Used for checking the information of the connected storage device, or copying, moving, and deleting data between the connected storage devices.<br>For details on the operating procedure, refer to page 1-16. |
| Data Transfer Viewer | Used for uploading and downloading files and folders with the data transfer service function.<br>  *  For details on the data transfer service, refer to the V9 Series Reference Manual 2. |
| Video Player | Displayed only when [Use video player] is selected at [System Setting] → [Other] → [Video Player Settings] using V-SFT version 6. This is used to display the video player.<br>  *  For details on playing videos, refer to the V9 Series Reference Manual 2. |

| Item | Description |
|---|---|
| PDF Viewer | Displayed only when [Use PDF viewer] is selected at [System Setting] → [Other] → [PDF Viewer Setting] using V-SFT version 6. This is used to display the PDF viewer.<br> *   For details on the PDF viewer, refer to the V9 Series Reference Manual 2. |

### Timing of Displaying the System Menu

- Upon pressing two of the four corners of the screen (only with Advanced models)
- Upon pressing the [SYSTEM] switch (only with Standard/Lite models)

### Timing of Hiding the System Menu

- Five seconds after displaying the system menu *
- Upon pressing the [SYSTEM] switch with the system menu displayed (only with Standard/Lite models)

   *   When the [Display], [Security] or [Storage Removal] switch on the system menu is selected, the system menu will remain displayed.

### Prohibiting the System Menu (only with Standard/Lite models)

When the [System Switch Prohibited] checkbox is selected in the [System Setting] → [Unit Setting] → [System/Mode Switch] tab window, the system menu cannot be displayed.
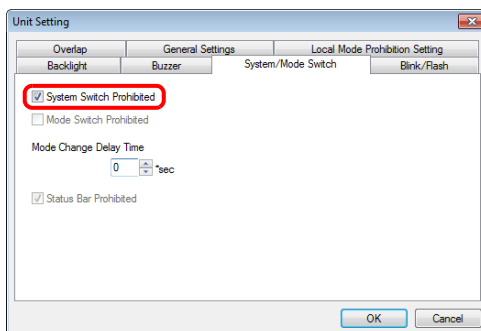


*   When the [System Switch Prohibited] checkbox is selected, the [Status Bar Prohibited] checkbox is also selected automatically.
*   When the [System Switch Prohibited] checkbox is selected, the system menu is not displayed in RUN mode, but it is displayed in Local mode.

**Notes**

- Any switches that are hidden by the system menu are disabled while the system menu is showing.

Switches behind the system menu are disabled. ———
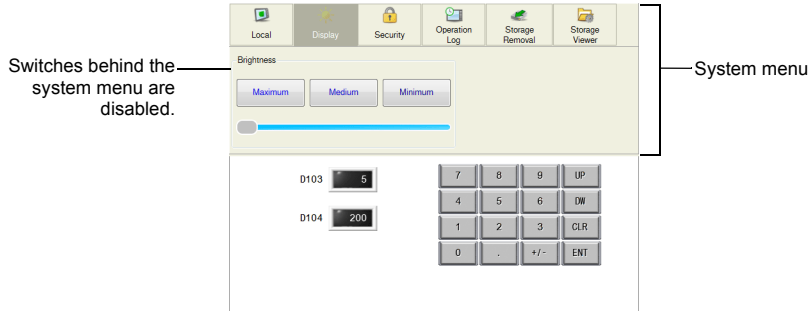
——— System menu

- The system menu has priority even over scrolling messages.
- The system menu and system keyboard cannot be displayed at the same time. If an attempt is made to display the system menu while the system keyboard is showing, the system keyboard will disappear and then the system menu will appear.
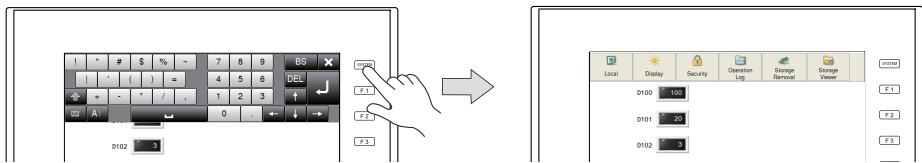
- Function switches are disabled when the V9 series unit is in RUN mode and the system menu is showing. However, they become valid after the [Operation Log] or [Storage Viewer] switch is selected in the system menu.

## Display

When the [Display] switch is pressed in the system menu, brightness adjustment and backlight control of the V9 series unit can be performed.
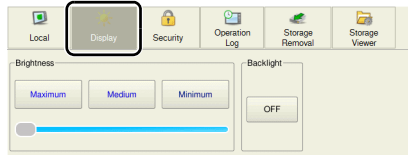
| Item | Description |
|------|-------------|
| Brightness [*1] | Adjusts the brightness in three levels, [Maximum], [Medium] and [Minimum]. Adjustment is possible in 16 levels by using the slider switch. [*2] |
| Backlight [*3] | Turns off the backlight. [*4] |

*1  When the brightness is reduced, the backlight life may be slightly extended.
*2  The brightness can be adjusted in 127 levels by using the macro command "BRIGHT".
    For details, refer to the V9 Series Macro Reference manual.
*3  [Backlight] is displayed under the following conditions:
    - When other than [Always ON] is selected for [Action] in the [System Setting] → [Unit Setting] → [Backlight] tab window in V-SFT version 6 (The backlight setting can be changed on the V9 series unit as well. For details, refer to "Backlight Setting" (page 2-50).
    - When in RUN mode (in operation)
    - When the backlight control device memory is used and it is set to "0"
*4  This is valid only when communication with the connected device is correctly established with [Comm. Error Handling: Disconnect] selected.

# Security

When the [Security] switch is pressed in the system menu, the security level can be changed (by logging in/out) and user names and their passwords for the security function can be registered.
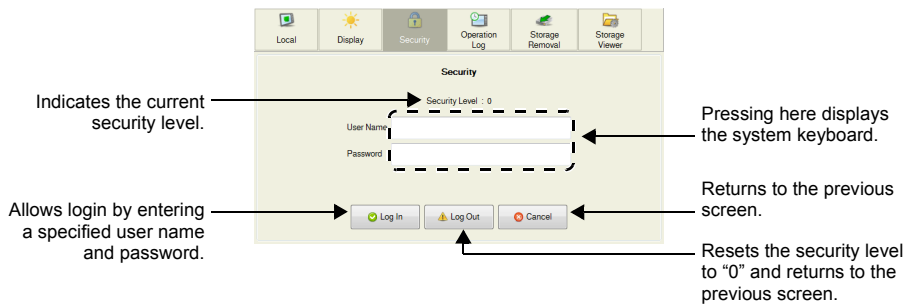
* The [Security] switch is displayed only in RUN mode (in operation).
  When configuring user settings in Local mode, refer to "User Settings" (page 2-74).
* For details on the security function, refer to the V9 Series Reference Manual 2.
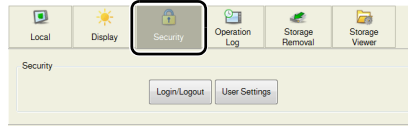


| | Item | Description |
|---|---|---|
| Security | Login/Logout | Displays the login/logout screen (page 1-8). |
| | User Settings | Displays the administrator authentication screen (page 1-10). |

## Login/Logout

The security level can be changed.



Indicates the current security level.

Allows login by entering a specified user name and password.

Pressing here displays the system keyboard.

Returns to the previous screen.

Resets the security level to "0" and returns to the previous screen.

### Login

This section explains the login procedure for a user of security level 4.

1. Display the system menu (*), press [Security] in the system menu and press the [Login/Logout] switch.

   * For details on how to display the system menu, refer to page 1-6.

2. Enter a user name and a password, and press the [Log In] switch.



3. The security level is set to "4" and the previous screen is displayed.

   * **Login is prohibited for users with a security level lower than that of the currently displayed screen. If such an attempt is made, the message "Level does not match." appears.**
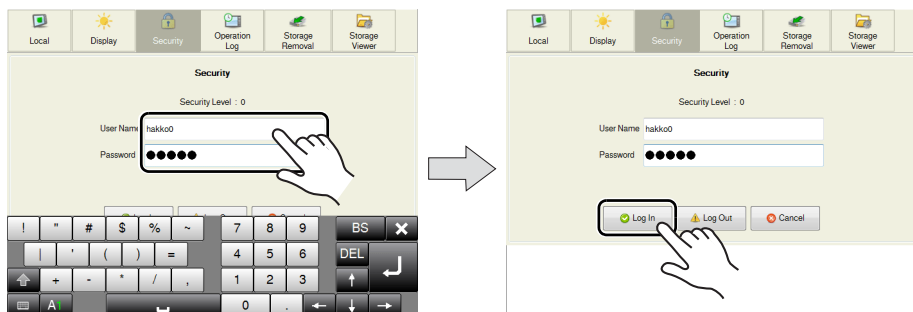
**1**

MONITOUCH Operations

**Logout**
This section explains the logout procedure for a user at security level 4.

1. Display the system menu <sup>(*)</sup>, press [Security] in the system menu and press the [Login/Logout] switch.

    * For details on how to display the system menu, refer to page 1-6.

2. Press the [Log Out] switch.



Current security level and user name

\* Password entry not required
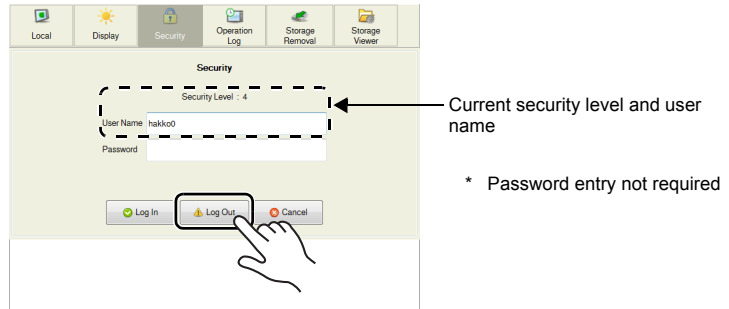
3. The security level is reset to "0" and the previous screen is displayed.

    **\* When logout is executed, the security level is set to zero (0).**
    **Since the previous screen is displayed again, logout must be done on a lower-security screen.**

## User List

Users registered for the security function are displayed in list form. In this list, a new user account can be added and the registered user accounts can be deleted or edited.

> \* To display a list of all users in Local mode, refer to "User Settings" (page 2-74).

⚠️ To display the user list by pressing [Security] in the system menu, a user with administrator privileges must log in (administrator authentication).

### Administrator Authentication

Perform authentication to display the user list.

1.  Display the system menu [(*)], press [Security] in the system menu and press the [User Settings] switch.

    > \* For details on how to display the system menu, refer to page 1-6.

2.  The administrator authentication screen is displayed. Enter an administrator name and password, and press the [OK] switch.



Pressing each setting field brings up the system keyboard to be used for configuration.

3.  Registered user accounts are listed as shown below.



Registered user accounts are listed.

> \* Press [Security] in the system menu or press the [SYSTEM] switch to hide the system menu (only with Standard/Lite models). Then administrator authentication is automatically cancelled.

### Adding a User Account

This section explains how to add a new user account in the user list.
A maximum of 32 accounts can be registered on the V9 series unit.

1.  Press the [Add] switch in the user list.
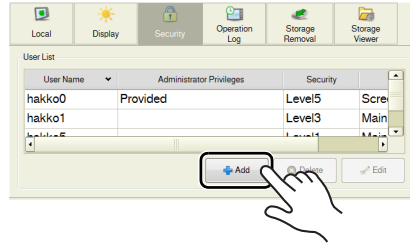


2.  Input a user name and password to add, and select a security level.
    A maximum of eight one-byte alphanumeric characters (case sensitive) can be used for a user name or password.
    To grant administrator privileges, select the [Grant administrator privileges.] checkbox.

    *   **The user name must be unique.**

    *   **The same password can be set for multiple users.**
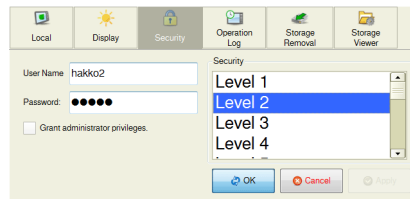


 **Administrator privileges**
Operations that can be performed on the V9 series unit differ depending on whether or not the user has administrator privileges.

| User | With administrator privileges | Without administrator privileges |
|---|---|---|
| Addition of a new user account | Permitted | Not permitted |
| Deletion of a registered user account | | |
| Editing of a registered user account | | |
| Display of the user list from [Security] in the system menu * | | |

\* Administer privileges are not required when displaying the user list from "User Settings" (page 2-74) in Local mode.

3.  Press the [OK] switch to add the user account to the list.
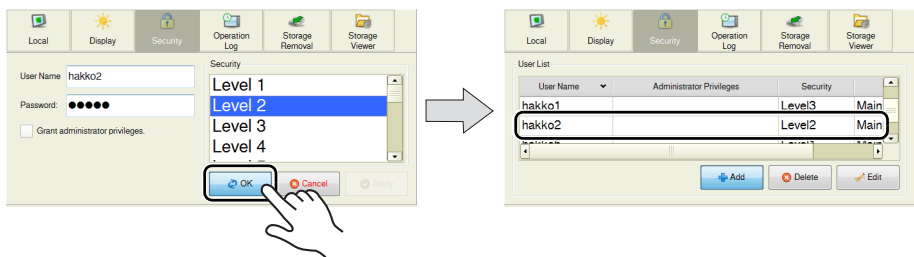
**Deleting a User Account**

This section explains how to delete a registered user account from the user list.

1.  Select a user account to delete from the user list and press the [Delete] switch.

⚠ • Only accounts registered on MONITOUCH can be deleted.
Accounts registered in the screen program cannot be deleted.
• Only the account of the user currently logged in (authenticated) as well as users with no administrator privileges granted can be deleted.
Accounts of other administrator users cannot be deleted.
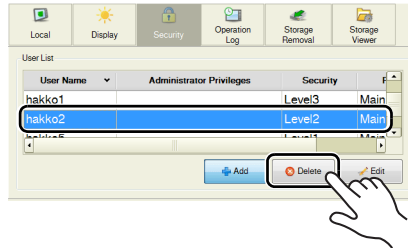


2.  The confirmation dialog shown below is displayed. To delete, press the [OK] switch.
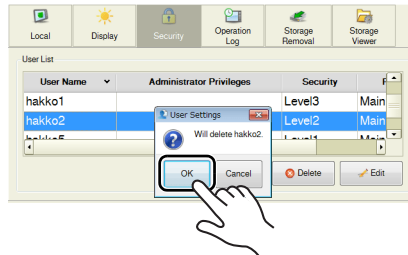


3.  The selected user account is deleted from the list.
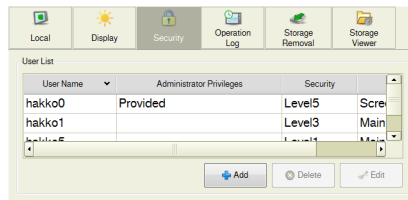
**Editing a User Account**

This section explains how to edit a registered user account in the user list.

1.  Select a user account to edit from the user list and press the [Edit] switch.

> ⚠ • Only accounts registered on MONITOUCH can be edited.
>     Accounts registered in the screen program cannot be edited.
>   • Only the account of the user currently logged in (authenticated) as well as users with no
>     administrator privileges granted can be edited.
>     Accounts of other administrator users cannot be edited.
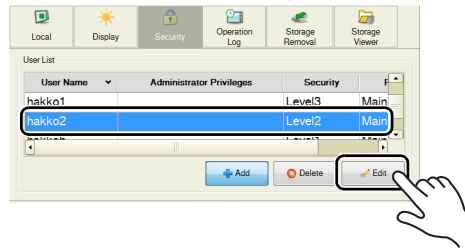


2.  Change the settings.
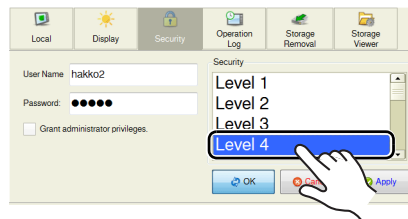


3.  After change, press the [Apply] or [OK] switch.
    The settings are updated.
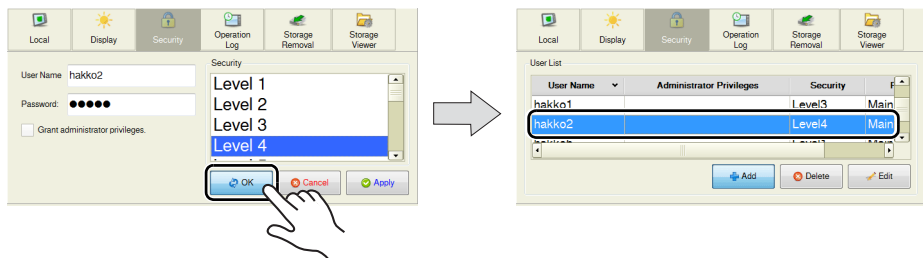
# Storage Removal

When the [Storage Removal] switch is pressed in the system menu, the display is changed as shown below. On this screen, access to the connected storage device can be stopped to remove the device safely. Each drive can be removed individually.

⚠️ Before removing the storage device safely, be sure to select [Storage Removal] in the system menu or press the [Storage Removal] switch, regardless of the operation mode, RUN or Local (Chapter 2).
  \*   For details on the [Storage Removal] switch, refer to the V9 Series Reference Manual 1.

| Item | | Description |
|------|------|-------------|
| SD Card (C:) | | Displays the connection status of the SD card inserted into the SD card slot. |
| | Connection status | Not connected (gray) |
| | | Connected (blue):   Removal allowed or removal prohibited |
| | Remove/ Reconnect | Removes a connected SD card or reconnects a disconnected SD card. For details, refer to page 1-15. |
| USB Storage (D:) | | Displays the connection status of the storage device connected to the USB-A port. |
| | Connection status | Not connected (gray) |
| | | Connected (blue):   Removal allowed or removal prohibited |
| | Remove/ Reconnect | Removes a connected storage device or reconnects a disconnected storage device. For details, refer to page 1-15. |

## Removing the Storage Device

This section explains how to remove the SD card from the SD card slot.

1. Display the system menu $^{(*)}$ and press the [Storage Removal] switch.

    \* For details on how to display the system menu, refer to page 1-6.

2. Press the [Remove] switch under [SD Card (C:)].
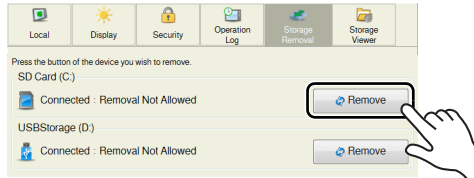


3. When the removal completes, the display is changed as shown below.
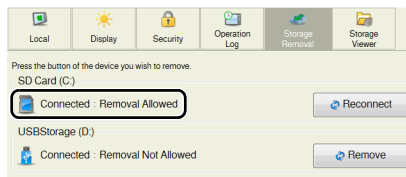


## Reconnecting the Storage Device

This section explains how to reconnect the SD card after "Removing the Storage Device" (page 1-15).

1. Display the system menu $^{(*)}$ and press the [Storage Removal] switch.

    \* For details on how to display the system menu, refer to page 1-6.

2. Press the [Reconnect] switch under [SD Card (C:)].
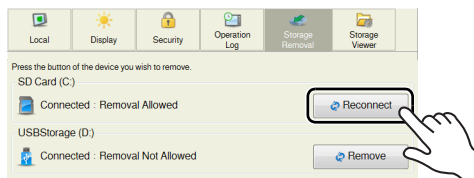


3. When reconnection completes, the display is changed as shown below.
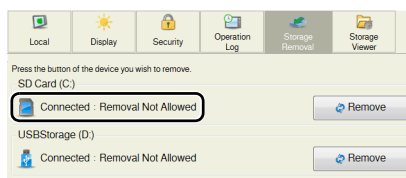
# Storage Viewer

When the [Storage Viewer] switch is pressed in the system menu, the display is changed as shown below. This screen is used for checking the information of the connected storage device, or copying, moving, and deleting data between the connected storage devices.
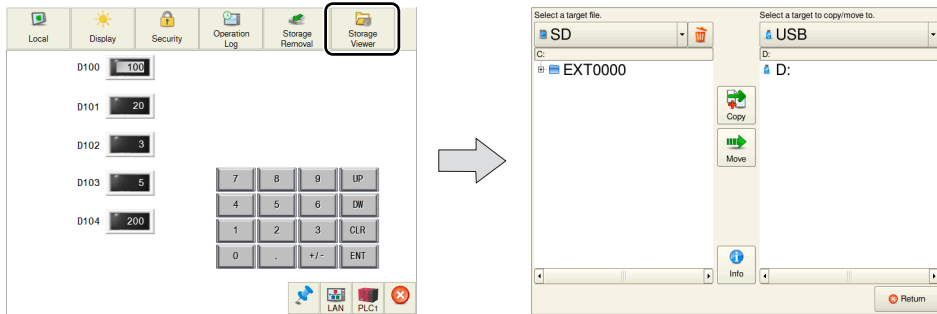


The screen is composed of the following items.



| Item | | Description |
|---|---|---|
| 1. | Drive selection (Source of copy/move/deletion) | Select a storage device from which data is to be copied, moved or deleted. |
| 2. | Path (Source of copy/move/deletion) | Displays the path to the file or folder selected at "1." |
| 3. | File information | Displays the folders and files stored in the storage device selected at "1." Select a file or folder to copy/move to. |
| 4. | Drive selection (destination of copy/move) | Select a storage device to which data is to be copied or moved. |
| 5. | Path (destination of copy/move) | Displays the path to the file or folder selected at "4." |
| 6. | Directory selection | Select a directory in the storage device selected at "4." as a copy or move destination. |
| 7. | Copy | Copies the selected file or folder. For details on the procedure, refer to page 1-17. |
| 8. | Move | Moves the selected file or folder. For details on the procedure, refer to page 1-18. |
| 9. | Delete | Deletes the selected file or folder. For details on the procedure, refer to page 1-19. |
| 10. | Information | Displays the drive information. You can check the connection status or free space on the storage device connected to the SD card slot or USB-A port.  |
| 11. | Return | Returns to the previous screen. |

MONITOUCH Operations

## Copy

This section explains how to copy data from the SD card inserted in the SD card slot to the USB flash drive connected to the USB-A port.

1.  Display the system menu $^{(*)}$ and press the [Storage Viewer] switch.

    *   For details on how to display the system menu, refer to page 1-6.

2.  Select a file to copy as well as its destination, and press the [Copy] switch.
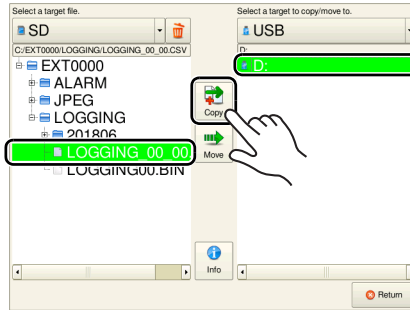


3.  The following confirmation dialog appears. Press the [OK] switch.
    The selected file is copied.
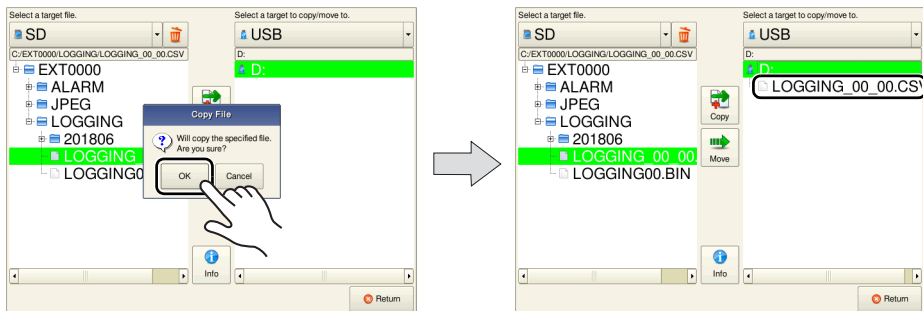


This completes the copy.

**Move**

This section explains how to move data from the SD card inserted in the SD card slot to the USB flash drive connected to the USB-A port.

1. Display the system menu <sup>(*)</sup> and press the [Storage Viewer] switch.

    *  For details on how to display the system menu, refer to page 1-6.

2. Select a file to move as well as its destination, and press the [Move] switch.
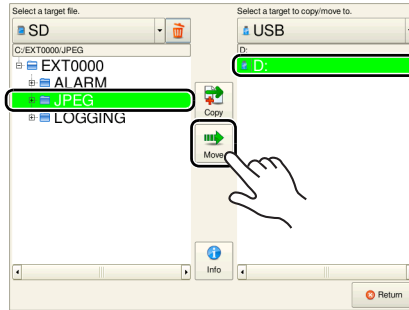


3. Press the [Move] switch. The following confirmation dialog appears. Press the [OK] switch.
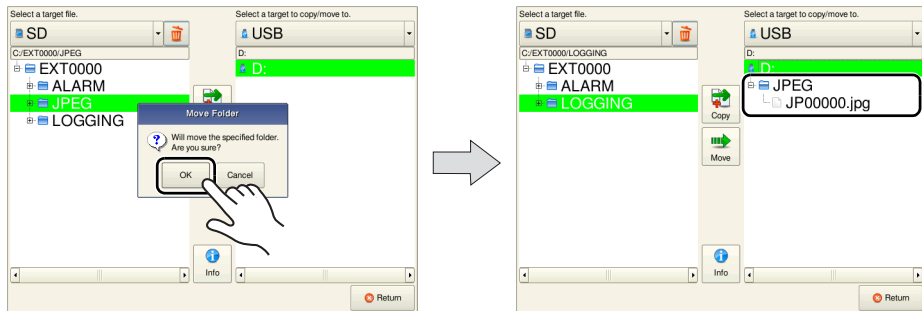


This completes the move.

**1**

MONITOUCH Operations

## Delete

This section explains how to delete data from the SD card inserted in the SD card slot.

1.  Display the system menu (*) and press the [Storage Viewer] switch.

    *   For details on how to display the system menu, refer to page 1-6.

2.  Select a file to delete and press the [Delete] switch.

⚠️ The file or folder selected in the left pane is deleted.
Note that the file or folder selected in the right pane will not be deleted.



The file or folder selected in the right pane will not be deleted.
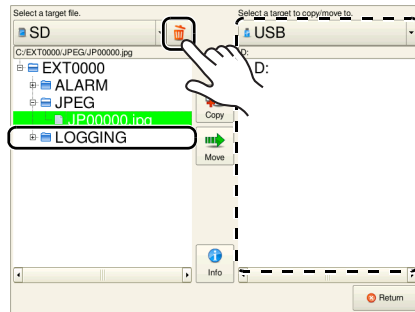
3.  The following confirmation dialog appears. Press the [OK] switch.
    The selected file is deleted.
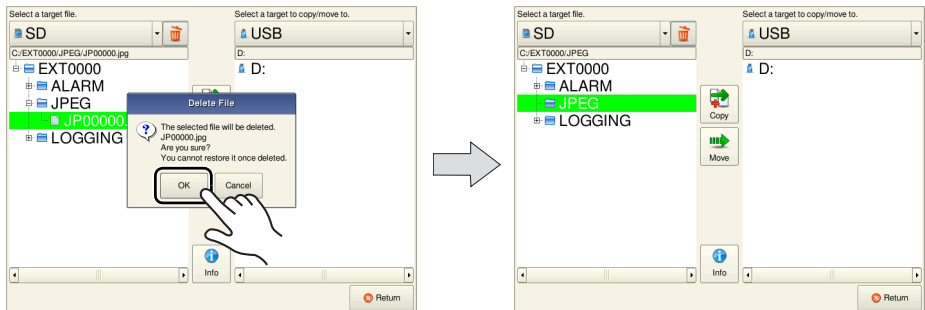


This completes the deletion.

## Error

If a selected file is in use or the selected directory is incorrect, the following error message is displayed.
Check the usage status of the selected file, or check if the selected directory is correct.

Example: When copying a file, the copy destination directory was incorrect.
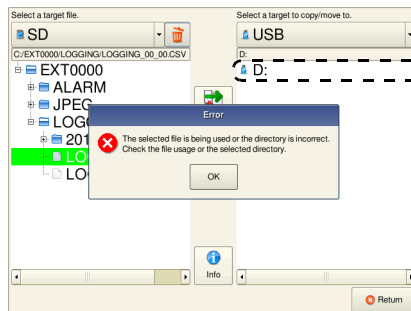
# 4. Status Bar

## Display Method

### Advanced Model

Press two of the four corners of the V9 series unit screen one by one to display the status bar.
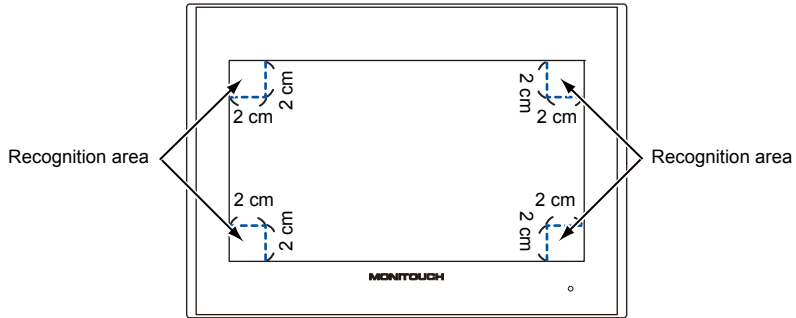


1. Press one corner of the screen for at least 2 seconds and release your finger when there is a beep.



Press the upper left corner for at least 2 seconds.
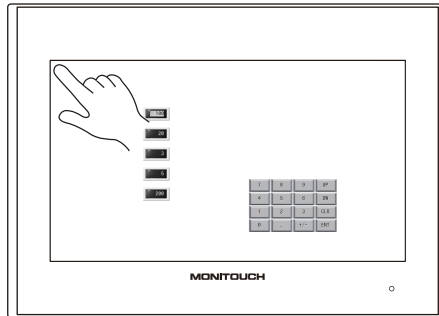
2. Then within one second, press a different corner and hold for at least 2 seconds to display the status bar.



Press a different corner for at least 2 seconds.

Status bar

\* If any of the items given below are placed in a corner on the screen, the system menu will not be displayed. Be sure to press a corner where none of the items are placed. If these items are placed in all four corners of the screen, switch the screen to one that has open corners and perform the above procedure to display the system menu.

Switches, data display parts with switches, display areas, scrolling messages, slider switches, scroll bars, and table data display parts

**1**

## Standard/Lite Models

Press the [SYSTEM] switch. *
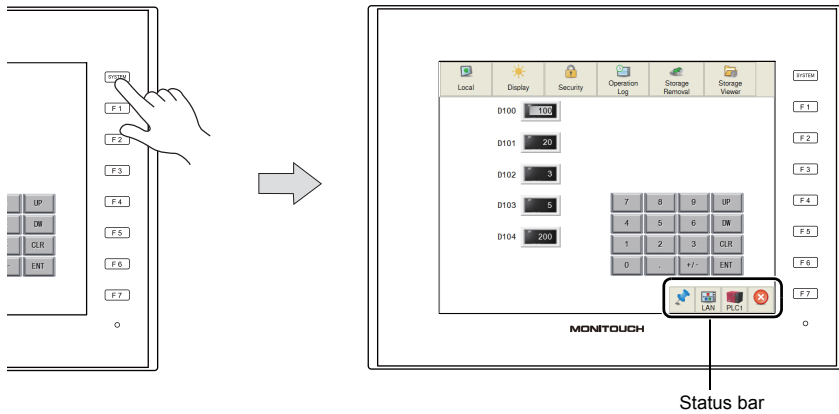


Status bar

> \* If the status bar does not appear by pressing the [SYSTEM] switch, [System Switch Prohibited] (page 1-6) or [Status Bar Prohibited] (page 1-22) was selected while editing the screen program on V-SFT version 6.

## Status Bar Types

The status bar includes the following icons.



Close

PLC 8WAY connection status

Wireless LAN status (only for wireless LAN I/F models)

LAN2 status (only for additional wired LAN I/F models)

LAN status

VNC connection status

VPN connection status

Display at all times valid/invalid

| Item | Description |
|---|---|
| Display at all times | Select whether or not to display the status bar at all times.<br>If valid, the status bar is displayed at all times even after the operation mode is switched over between RUN and Local.<br><br>Display at all times: valid        Display at all times: invalid |
| VPN connection status | This icon is shown during VPN connection.<br>When VPN connection is disabled, the icon disappears.<br>For details, refer to page 1-24. |
| VNC connection status | This icon is shown during connection with the VNC client.<br>When the client is disconnected, the icon disappears.<br>For details, refer to page 1-25. |
| LAN status<br>LAN2 status | This icon indicates the link status of the LAN/LAN2 connection.<br>For details, refer to page 1-26. |

| Item | Description |
|---|---|
| Wireless LAN status | This icon indicates the link status of wireless LAN connection. When the V9 series unit is operating in station mode, the signal status is displayed. For details, refer to page 1-27. |
| PLC 8WAY connection status | Indicates the status of communication with the connected device when [Comm. Error Handling: Disconnect] is selected. For details, refer to page 1-28. |
| Close | Hides the status bar. |

### Timing of Displaying the Status Bar

- Upon pressing two of the four corners of the screen (only with Advanced models)
- Upon pressing the [SYSTEM] switch (only with Standard/Lite models)
- When the status of communication with the connected device is changed (from normal to error) [1]

  [1]  When the communication status is changed while the backlight is off, the backlight is forcibly turned on.

### Timing of Hiding the Status Bar

- Upon pressing the [Close] icon at the right end of the status bar
- 15 seconds after displaying the status bar [1] [2]
- Upon pressing the [SYSTEM] switch with the status bar displayed (only with Standard/Lite models) [1]
- Upon recovery of communication with all communication equipment

  [1]  When the status bar is set to "display at all times", it will not disappear.
  [2]  It will not disappear when the detailed status information is displayed.

### Prohibiting the Status Bar

When the [System Switch Prohibited] or [Status Bar Prohibited] checkbox is selected in the [System Setting] → [Unit Setting] → [System/Mode Switch] tab window, the status bar cannot be displayed.
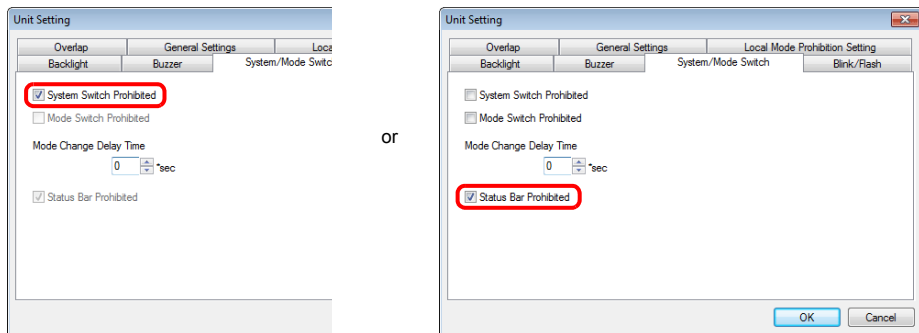


*  For Advanced models, only [Status Bar Prohibited] is available.
*  The status bar will not be displayed in RUN mode, but can be displayed in Local mode.

**Notes**

- Any switches that are hidden by the status bar and detailed status information are disabled while the status bar is showing.



Switches behind the status bar and status information are disabled.

Detailed status information
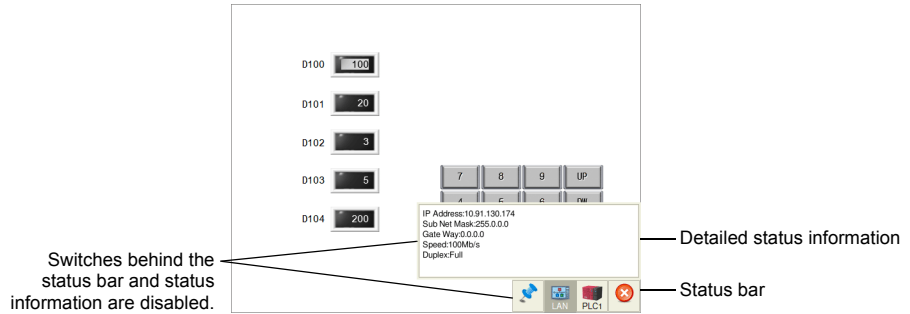
Status bar

- The status bar has priority over scrolling messages displayed at the bottom of the screen.



Status bar

Scrolling message
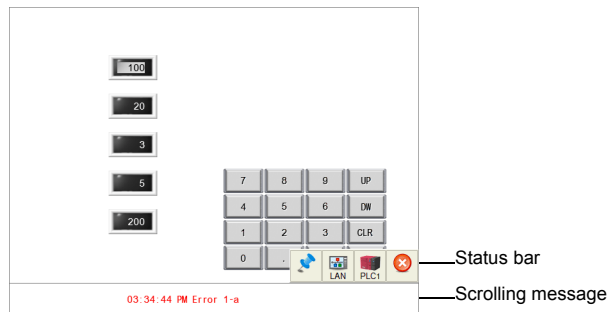
- The status bar and system keyboard cannot be displayed at the same time. If an attempt is made to display the status bar while the system keyboard is showing, the system keyboard will disappear and then the status bar will appear.
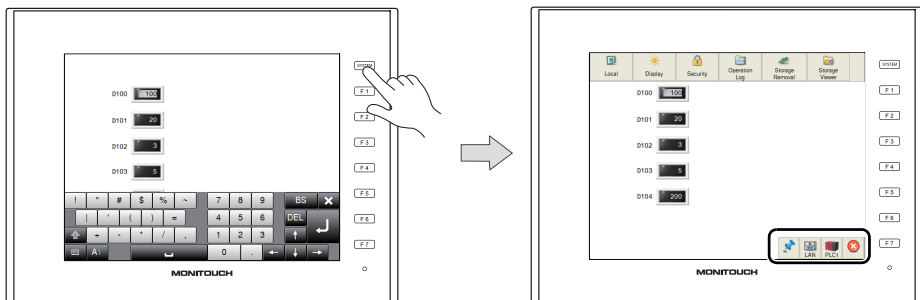
# VPN Connection Status

This icon is shown when VPN connection is enabled.
When VPN connection is disabled, the icon disappears.

| Connected | Disconnected | VPN connection disabled |
|---|---|---|
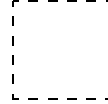
When the VPN connection status icon is pressed during connection, the following confirmation dialog appears.
Press the [Unlink] switch to disconnect from the VPN.

The IP address allocated to the V9 series unit for VPN connection
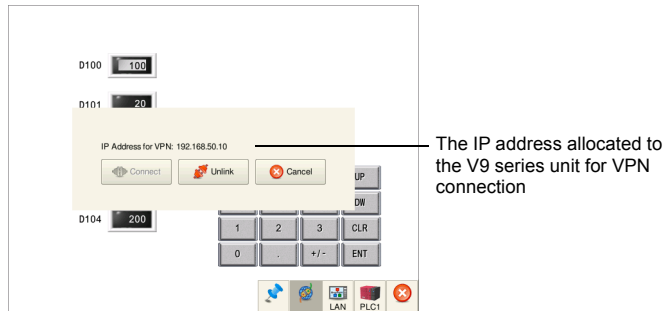
When the VPN connection status icon is pressed when disconnected from the VPN, the following confirmation dialog appears.
Press the [Connect] switch to allocate an IP address for VPN connection and connect to the VPN.

\* For details on VPN connection, refer to the separately provided "Web Machine Interface" manual.

# VNC Connection Status

This icon is displayed when the VNC server is used on the V9 series unit with the client connected. When the client is disconnected, the icon disappears.

Connected                                    Disconnected



When the VNC connection status icon is pressed while the client is connected, the following confirmation dialog appears. Pressing the [OK] switch forcibly disconnects the client.
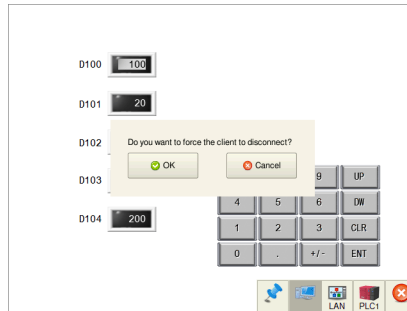


\* For details on the VNC server, refer to the V9 Series Reference Manual 2.

# LAN Status / LAN2 Status (Only for Additional Wired LAN I/F Models)

This icon indicates the link status of LAN/LAN2 connection.

Link established                    Cable disconnected or link not established
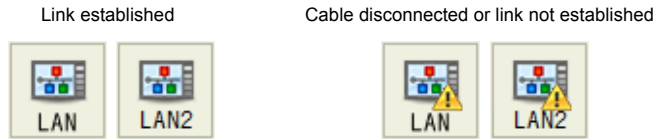


When the LAN status or LAN2 status icon is pressed, detailed information can be viewed.
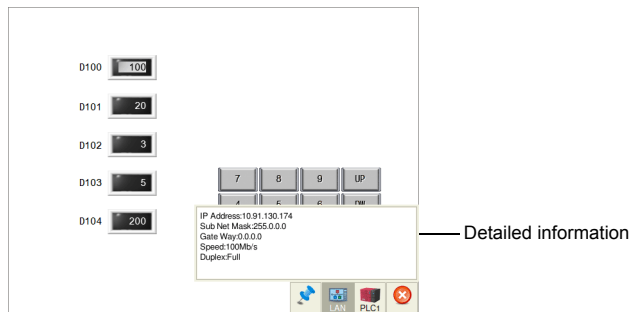


Detailed information

| Item | Description |
|------|-------------|
| IP Address | Indicates the IP address, subnet mask, and default gateway. |
| Sub Net Mask | |
| Gate Way | |
| Speed | Indicates the communication speed, 100 Mb/s or 10 Mb/s. |
| Duplex | Indicates the communication mode, Full (full duplex) or Half (half duplex). |

**1**

MONITOUCH Operations

# Wireless LAN Status (Only for Wireless LAN I/F Models)

This icon indicates the link status of wireless LAN connection.
When the V9 series unit is operating in station mode, the signal status is displayed.

• When the V9 series is in access point or ad-hoc mode

| Link established | Cable disconnected or link not established |
|---|---|

• When the V9 series is in station mode

| Link established | Cable disconnected or link not established |
|---|---|

When a link is established, the icon can display the signal strength. The signal strength is updated every 10 seconds.

| Icon | | | | | |
|---|---|---|---|---|---|
| Signal strength | Level: 1 (lowest) | Level: 2 | Level: 3 | Level: 4 | Level: 5 (highest) |

When the wireless LAN status icon is pressed, detailed information can be viewed.

| D100 | 100 |
| D101 | 20 |
| D102 | 3 |
| D103 | 5 |
| D104 | 200 |

| 7 | 8 | 9 | UP |
IP Address:192.168.2.1
Sub Net Mask:255.255.255.0
Gate Way:
SSID:0-V9101iWRD-4

—— Detailed information

LAN  LAN2  PLC1

| Item | Description |
|---|---|
| IP Address | Indicates the IP address, subnet mask, and default gateway. |
| Sub Net Mask | |
| Gate Way | |
| SSID | • When the V9 series is in access point mode<br>  Displays the SSID of the local station.<br>• When the V9 series is in station mode or in ad-hoc mode<br>  The SSID of the configured connection target is displayed. |

# PLC 8WAY Connection Status

This icon indicates the status of communication with the connected device when [Comm. Error Handling: Disconnect] is selected.

Link established

Link not established

When connected with the simulator *, the following icon is displayed instead.

\* For details on the simulator, refer to page 2-48.

When the PLC 8WAY connection status icon is pressed with no link established, the detailed information can be viewed.
The information is updated every five seconds.

\* If the PLC 8WAY connection status icon is pressed with a link established, nothing is displayed.

Detailed information
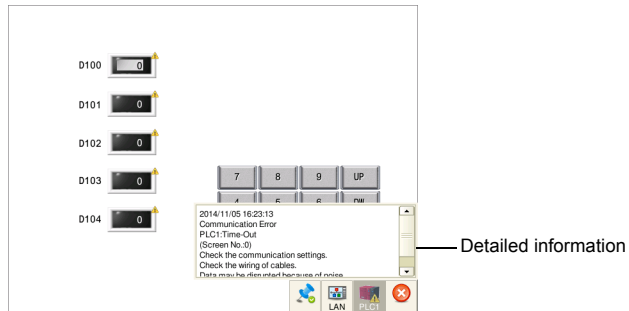
| Item | Description |
| --- | --- |
| Time | Displays the time when the communication error was detected. |
| Error message *1 | Displays the contents of the communication error. |
| Measure | Displays a countermeasure to the communication error. |

\*1 For details on error messages, refer to "Error Messages" (page 3-11).

# 2 Local Mode Screen

# 1.      Switching to Local Mode

The procedure for switching from RUN mode to Local mode differs depending on the V9 series model.

**Advanced Model**

1.  Press one corner of the screen [*1] for at least 2 seconds and release your finger when there is a beep.



Recognition area
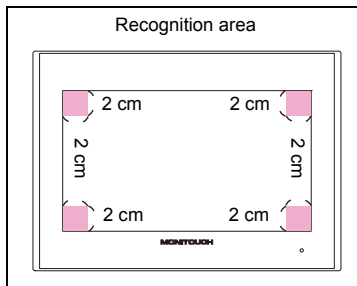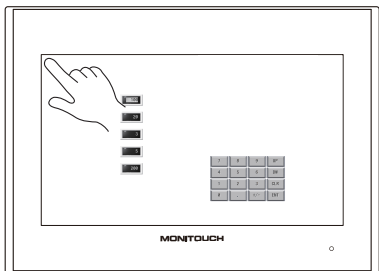
2.  Then within one second, press a different corner [*1] and hold for at least 2 seconds to display the system menu.
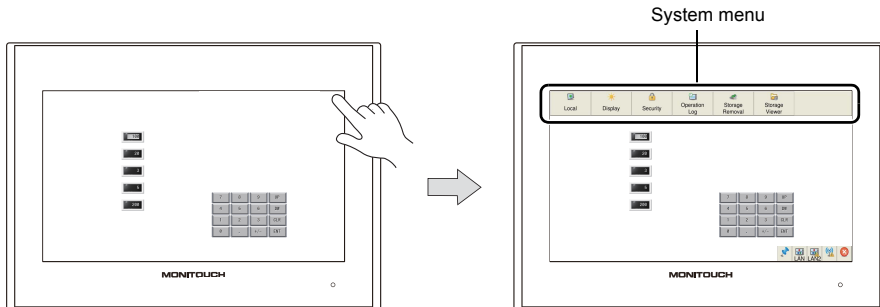
System menu

3.  Press the [Local] switch on the displayed system menu.



Splash screen [*2]                                   Local mode screen



Progress bar            Message
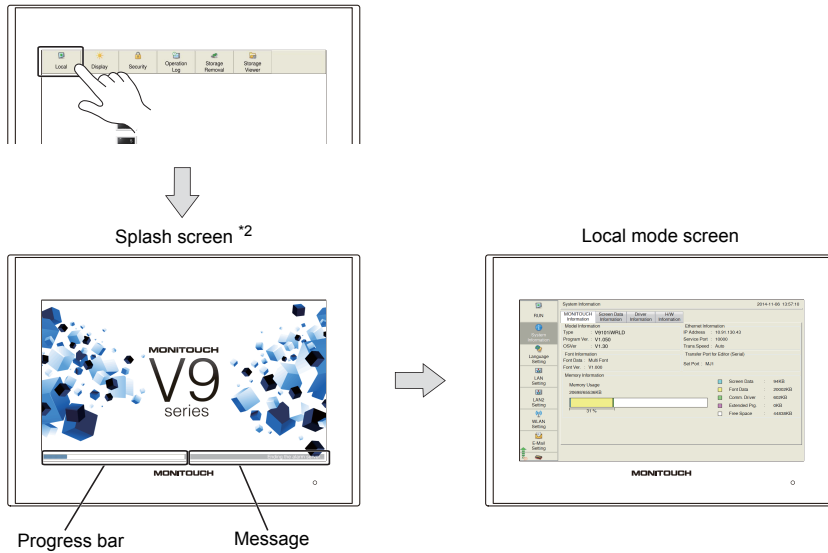
*1   If any of the items given below are placed in a corner on the screen, the system menu will not be displayed. Be sure to press a corner where none of the items are placed. If these items are placed in all four corners of the screen, switch the screen to one that has open corners and perform the above procedure to display the system menu.
     Switches, data display parts with switches, display areas, scrolling messages, slider switches, scroll bars, and table data display parts
*2   The splash screen can be changed as desired. For details, refer to V9 Series Reference Manual 2.

## Standard/Lite Models

Press the [SYSTEM] switch to display the system menu [*1] and then press the [Local] switch [*2].
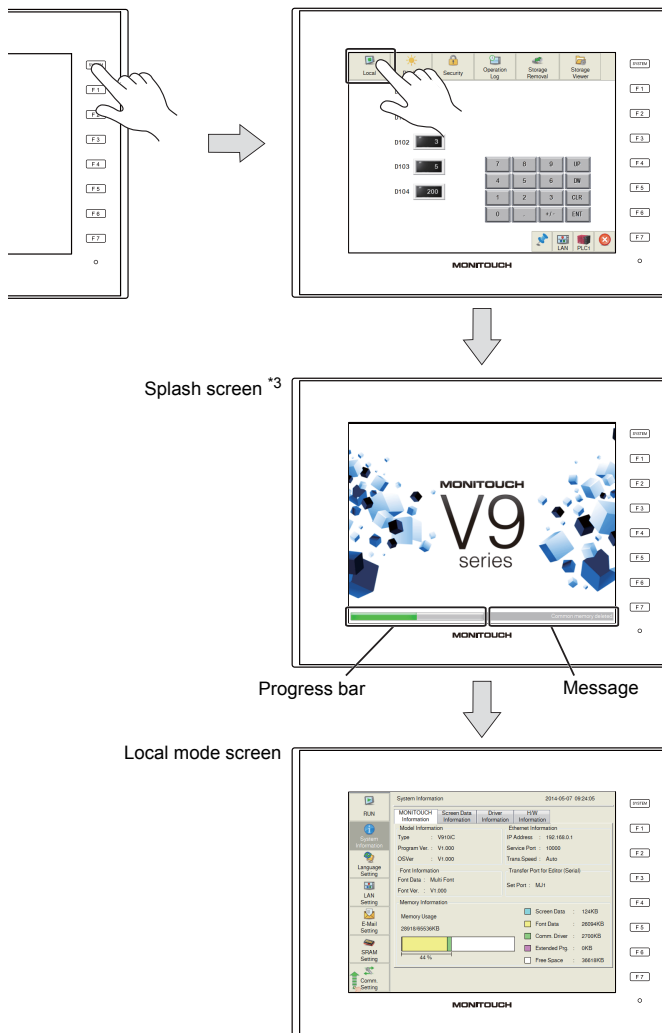


Splash screen [*3]



Progress bar                    Message

Local mode screen



---

*1   If the system menu does not appear by pressing the [SYSTEM] switch, [System Switch Prohibited] is selected (page 1-6). To enable the [SYSTEM] switch, hold down the [F7] switch with the [SYSTEM] switch for the time specified for [Change-over Time] (max. 30 seconds). [Change-over Time] is set in the screen program.

*2   If the [Local] switch does not appear in the system menu by pressing the [SYSTEM] switch, [Mode Switch Prohibited] is selected. To enable the switch, press the [SYSTEM] switch to display the system menu, and hold down the [F7] switch with the [F1] switch for the time specified for [Change-over Time] (max. 30 seconds). [Change-over Time] is set in the screen program.

*3   The splash screen can be changed as desired. For details, refer to the V9 Series Reference Manual 2.

# 2. Local Mode Screen

The Local mode screen shows various information about the V9 series, such as system information, and screen program information, etc.

Also, it works as a system screen for transferring a screen program between a PC and V9 series unit.

To transfer a screen program from a PC to the V9 series unit through serial communication, be sure to display this screen. (However, it is not necessary if MJ1 is not used.)



Menu icons can be scrolled up and down.

# Composition of Local Mode Screens

The Local mode screens are configured as shown below:

Local mode screen ──── [RUN] (refer to page 2-6.)

[System Information] (refer to page 2-7.)
- [MONITOUCH Information] (refer to page 2-7.)
- [Screen Data Information] (refer to page 2-8.)
- [Driver Information] (refer to page 2-8.)
- [H/W Information] (refer to page 2-9.)

[Language Setting] (refer to page 2-10.)
- [Language Setting] (refer to page 2-10.)
- [Keyboard] (refer to page 2-11)

[LAN Setting] (refer to page 2-12.)
- [IP Setting] (refer to page 2-13.)
- [Network Table Edit] (refer to page 2-17.)
- [Option] (refer to page 2-19.)

[LAN2 Setting] (Only for additional wired LAN I/F models) (refer to page 2-20.)
- [IP Setting] (refer to page 2-20.)
- [Network Table Edit] (refer to page 2-22.)
- [Option] (refer to page 2-22.)

[WLAN Setting] (Only for wireless LAN I/F models) (refer to page 2-23.)
- [IP Setting] (refer to page 2-24.)
- [Wireless Setting] (refer to page 2-25.)
- [Select AP to Connect] (refer to page 2-26.)
- [Wireless Option] (refer to page 2-28.)

[LAN Unit Setting] (Only with the CUR-03 communication I/F unit installed) (refer to page 2-30.)
- [IP Setting] (refer to page 2-30.)
- [Network Table Edit] (refer to page 2-31.)
- [Option] (refer to page 2-31.)

[VPN Setting] (refer to page 2-32.)

[Cloud Setting] (refer to page 2-32.)

[E-Mail Setting] (refer to page 2-33.)
- [Connection Setting] (refer to page 2-34.)
- [Mail Setting] (refer to page 2-35.)

[SRAM Setting] (refer to page 2-37.)

[Communication Setting] (refer to page 2-39.)
- [Comm. Param.] (refer to page 2-41)
- [Connection Target Setting] (refer to page 2-42.)
- [Individual Parameter] (refer to page 2-42.)
- [Communication I/F Unit Parameters] (refer to page 2-43.)
- [Multi-Link] (refer to page 2-43.)
- [Multi-Link2] (refer to page 2-44.)

[Simulator Setting] (refer to page 2-48.)

[System Setting] (refer to page 2-49.)
- [Buzzer Setting] (refer to page 2-50.)
- [Backlight Setting] (refer to page 2-50.)

[Date/Time Setting] (refer to page 2-51.)

[Storage Transfer] (refer to page 2-54.)

[I/O Check] (refer to page 2-66.)
- [Touch switches and media] (refer to page 2-67.)
- [Network Test] (refer to page 2-70.)
- [Duplicate IP Test] (refer to page 2-72.)
- [RGB Adjustment] (refer to page 2-73.)

[User Settings] (refer to page 2-74.)

[Standards] (Only for wireless LAN I/F models) (refer to page 2-79.)

[OS Update] (refer to page 2-80.)

# 1. RUN

Pressing [RUN] in the menu icons switches to RUN mode.

Menu icons                        Splash screen [*1]



Progress bar              Message

RUN screen



*1   The splash screen can be changed as desired. For details, refer to the V9 Series Reference Manual 2.

**2**

# 2. System Information

Pressing [System Information] in the menu icons brings up the System Information screen. This screen is used to view the information of the V9 series, screen program, etc.
This is the screen first displayed when the operation mode is switched from RUN to Local.

Menu icons                                    System Information screen



## 2-1. MONITOUCH Information

The [MONITOUCH Information] tab window on the System Information screen shows various information on the V9 series.

[MONITOUCH Information] tab window
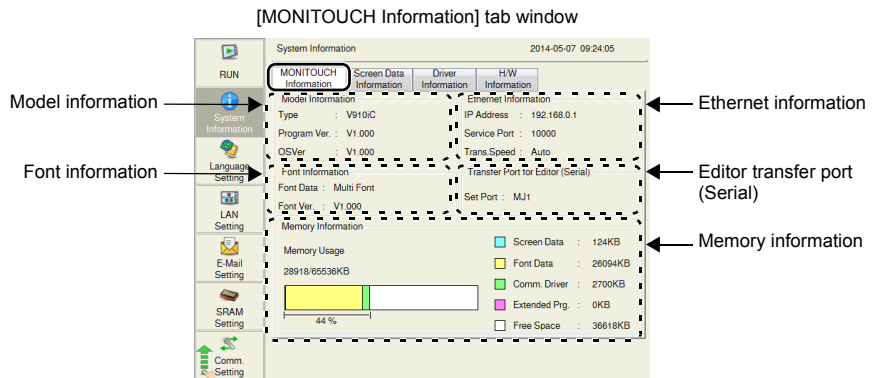


| Item | | Description |
|---|---|---|
| Model Information | Type | Indicates the model of the V9 series unit. |
| | Program Ver. | Indicates the version of the MONITOUCH system program. |
| | OSVer | Indicates the version of the operating system. |
| Ethernet information | IP Address | Indicates the IP address of the V9 series unit. |
| | Service Port | Indicates the port number of the V9 series unit.<br>This is used for macro commands of EREAD, EWRITE, SEND and MES as well as the Ethernet DLL function. |
| | Trans. Speed | Indicates the Ethernet transmission speed. |
| Font Information | Font Data | Indicates the font data transferred into MONITOUCH. When two or more types of fonts have been transferred, "Multi Font" is displayed. |
| | Font Ver. | Indicates the font version. |
| Transfer Port for Editor (Serial) | Set Port | Indicates the serial port used for screen program transfer. |
| Memory information | Memory Usage | Displays the usage status of FROM. |

## 2-2.    Screen Data Information

The [Screen Data Information] tab window on the System Information screen shows the screen program information.

[Screen Data Information] tab window



Detailed information

Screen displaying device memory

Password-protected settings
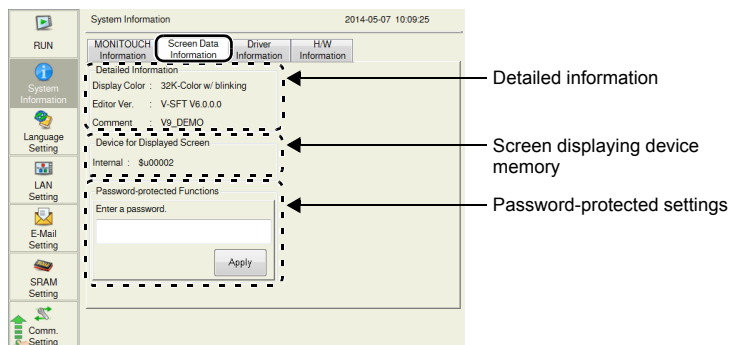
| Item | | Description |
|---|---|---|
| Detailed information | Display Color | Indicates the display color specified in the screen program. |
| | Editor Ver. | Indicates the version of the editor with which the screen program was created. |
| | Comment | Indicates a file comment for the screen program. |
| Device for Displayed Screen | | Indicates an address of the device memory that controls the screen by external commands and stores data of the currently displayed screen. |
| Password-protected Functions | | Displayed when the Local-mode prohibition setting is used and a password for cancelling all prohibition settings at once is set. For details on the password-protected settings, refer to page 2-83. |

## 2-3.    Driver Information

The [Driver Information] tab window on the System Information screen shows information of the connected device.

[Driver Information] tab window
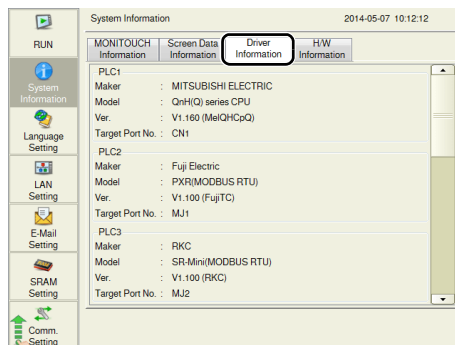


| Item | | Description |
|---|---|---|
| PLC1 - 8 | Maker | Indicates the maker of the connected device. |
| | Model | Indicates the model of the connected device. |
| | Ver. (driver file name) | Indicates the version of the communication I/F driver and its file name. |
| | Target Port No. | Indicates the specified connection port. |

**2**

Local Mode Screen

## 2-4.    H/W Information

The [H/W Information] tab window on the System Information screen shows the hardware information of the V9 series unit.

[H/W Information] tab window
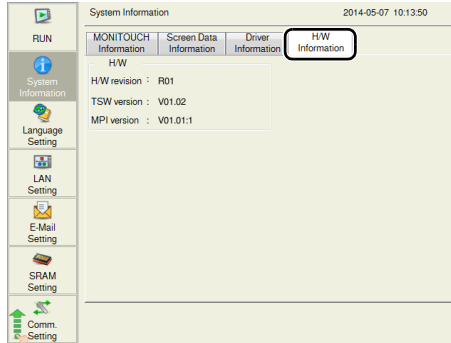


| Item | | Description |
|---|---|---|
| H/W information | H/W revision | Indicates the revision number of the hardware. |
| | TSW version | Indicates the version of the touch switch firmware. |
| | MPI version | Indicates the version of the MPI firmware. |

# 3.   Language Setting

Pressing [Language Setting] in the menu icons brings up the Language Setting screen.
This screen is used to change the interface language for Local mode and the USB keyboard type.

<table>
<tr><td align="center">Menu icons</td><td align="center">Language Setting screen</td></tr>
</table>
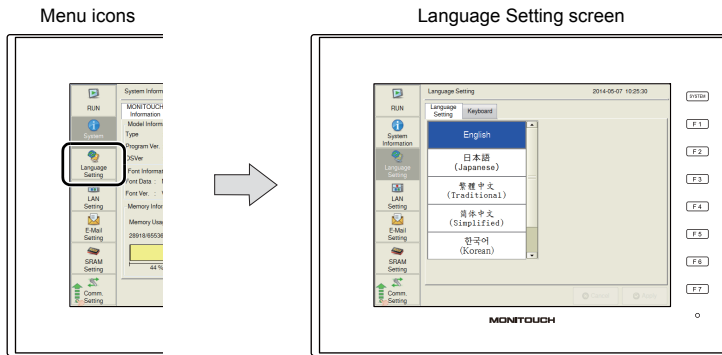


The Language Setting screen can be displayed when any of the following screens are displayed:

- Default screen

    * On the default screen, the interface language can be selected from English, Japanese, Chinese (simplified), Chinese (traditional) or Korean.

- Local mode screen
- Error message screen

## 3-1.   Language Setting

The [Language Setting] tab window on the Language Setting screen allows you to change the interface language of the Local mode screen.

<div align="center">[Language Setting] tab window</div>



Select a desired language and press the [Apply] switch to confirm the setting.
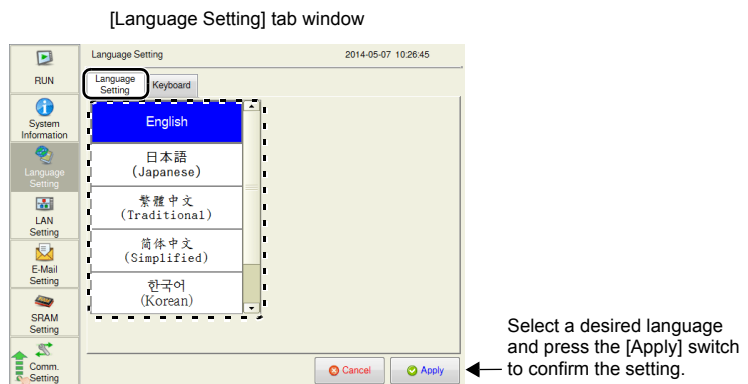
| Item | Description |
|------|-------------|
| Language Setting | Select a language by pressing the [English], [ 日本語 (Japanese)], [ 繁體中文 (Traditional)], [ 简体中文 (Simplified)], or [ 한국어 (Korean)] switch. * |

* Languages selected in the [Font Setting] → [Transfer Setting] window in V-SFT version 6 are displayed. English can always be selected.

The language selected in the [Language Setting] tab window is applied to the following screens:

- Local mode screen
- System menu
- Status bar

- Messages at the bottom right of the splash screen
- Dialog box displayed during transfer
- Error message screen

## 3-2.    Keyboard

The [Keyboard] tab window on the Language Setting screen allows you to select the type of the keyboard to connect to the USB-A (master) port.

[Keyboard] tab window



Select a keyboard type and press the [Apply] switch to confirm the setting.

| Item | Description |
|---|---|
| Keyboard Selection | Select a keyboard type, from English or Japanese. |

\*   [English] is selected as default.
    After changing the keyboard type in the [Keyboard] tab window and pressing the [Apply] switch, the selected type is retained even if the power is turned off and back on again.

# 4. LAN Setting

Pressing [LAN Setting] in the menu icons brings up the LAN Setting screen.
This screen is used to set an IP address of the V9 series unit.

Menu icons                                    LAN Setting screen
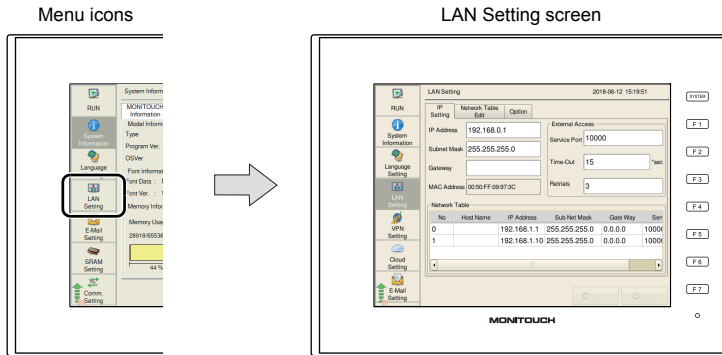


When no LAN cable is connected or a link is not established, the indication of the [LAN Setting] icon is changed as follows.
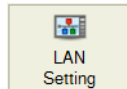
Link established                          Cable disconnected or link not established



LAN Setting screen



Press the [Apply] switch to confirm the setting.

| Item | Description |
|------|-------------|
| Restore Screen Data Settings | Restores the screen program settings after the IP settings were changed on the V9 series unit. <br> * When settings are restored, the changes made on the unit are cancelled. <br><br> For details on the handling of a screen program changed in Local mode, refer to page 2-81. |

**2**

## 4-1.    IP Setting

The [IP Setting] tab window on the LAN Setting screen allows you to set or change the IP address setting of the V9 series unit.

[IP Setting] tab window

Pressing each setting field brings up the system keyboard to be used for configuration.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | Description |
|---|---|---|
| IP Address [*1] | | Set the IP address for the V9 series unit. <br> (Default: 192.168.0.1) |
| Subnet Mask [*1] | | Set the subnet mask. |
| Gateway [*1] | | Set the default gateway. <br> * If a gateway is not used, leave this field blank. <br>   (Do not use "0.0.0.0".) |
| MAC Address | | Indicates the MAC address of the V9 series unit. |
| External Access | Service Port [*1] [*2] | Set a port number of the V9 series unit (1024 to 65535). <br> ("8001" is not available.) |
| | Time-Out [*2] | Set the timeout time. |
| | Retrials | 0 to 255 <br> Set the number of retries to be performed when a timeout occurs. |
| Network Table | | When a network table setting is set in the screen program, the contents of the network table are displayed. <br> Tap an IP address to select from the network table. |

*1   For details on the setting items, refer to page 2-16.
*2   Used for macro commands of EREAD, EWRITE, SEND and MES as well as Ethernet DLL functions.

⚠️
- Set an IP address in a different network group from that for the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If set in the same network group, the system will not operate correctly.
- Set a gateway for only one of the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If multiple gateways are set, the system will not operate correctly.

## IP Address Setting for the V9 Series

When using the Ethernet function, set the IP address for the V9 series unit.
An IP address can be set either on the V9 unit or in the screen program.

### Setting on the V9 Unit

1. Press [LAN Setting] in the menu icons and open the [IP Setting] tab window.

2. Set each item.
   - When inputting directly:
     Press each item and make a setting using the system keyboard.



If a gateway is not used, leave the field blank.
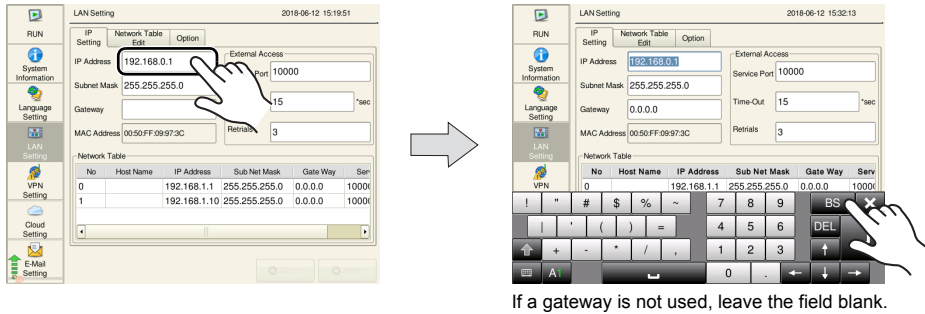
   - When selecting from the network table:
     Tap an IP address to select from the network table.
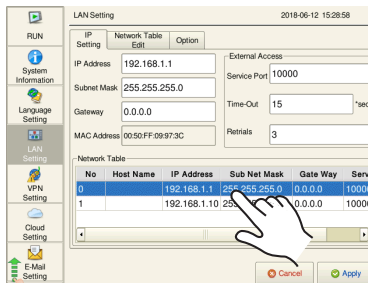


3. Press the [Apply] switch to confirm the setting.
   Select [System Information] → [MONITOUCH Information], and check the contents in the [Ethernet Information] field.

**2**
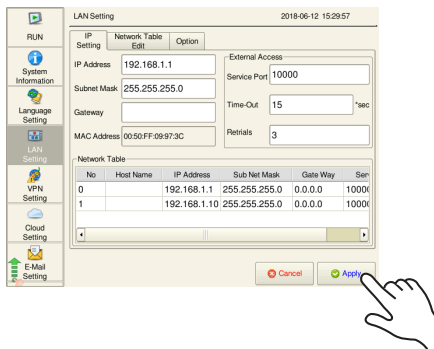
## Setting Using the V-SFT Editor

1.  Select [System Setting] → [Ethernet Communication] → [Local Port Address] on V-SFT.
    The [IP Address Setting] window is displayed.

2.  Select the [Set IP] checkbox in the [LAN] tab window, and set each item.



| | |
|---|---|
| ☐ Select IP Address from Network Table | This is valid when the IP address of the V9 series unit has been registered in the network table. Select a network table number from 0 to 255 to set the IP address. |
| IP Address * | Set the IP address for the V9 series unit. |
| ☐ Default Gateway * | Set the default gateway. |
| ☐ Subnet Mask * | Set the subnet mask. When this box is not checked, the subnet mask is automatically assigned based on the first octet of the IP address. <br> Example: <br> IP address 172.16.200.185: "255.255.0.0" is set. <br> IP address 192.168.1.185: "255.255.255.0" is set. |
| Port No. * | Set a port number from 1024 to 65535. ("8001" is not available.) |
| Send Timeout | Set a timeout period for transmitting macro commands EREAD, EWRITE, SEND, MES or Ethernet DLL functions. |
| Retrials | 0 to 255 <br> Set the number of retries to be performed when a timeout occurs. |
| Device Protect <br>  ☐ Internal Device <br>  ☐ Memory Card Device | Select these checkboxes to write-protect the corresponding device memory from PCs or other stations. |

\*  For details on the setting items, refer to page 2-16.

3.  Click [OK].

4.  Transfer the screen program to the V9 series unit.

5.  Select the [Restore Screen Data Settings] switch in the [LAN Setting] → [IP Setting] tab window in Local mode, and press the [Apply] switch.

6.  Select [System Information] → [MONITOUCH Information], and check the contents in the [Ethernet Information] field.

**IP Address**

This is an address that is used for recognizing each node on the Ethernet and should be unique.
The IP address is 32-bit data which consists of the network address and the host address and can be classified into classes A to C depending on the network size.

| Class A | 0 | Network address (7) | Host address (24) | |
| Class B | 1 0 | Network address (14) | Host address (16) | |
| Class C | 1 1 0 | Network address (14) | Host address (8) | |

<Notation>
Data consisting of 32 bits is divided into four segments in decimal notation and each segment is delimited with a period.
Example: The IP address in class C shown below is represented as "192.128.1.50".
11000000 10000000 00000001 00110010

<Unavailable IP addresses>
- "0" is specified for the first octet.
  Example: 0.x.x.x
- "127" is specified for the first octet (loop back address).
  Example: 127.x.x.x
- "224" or more is specified for the first octet (for multi-cast or experiment).
  Example: 224.x.x.x
- The host address consists of only "0" or "255" (broadcast address).
  Example: 128.0.255.255, 192.168.1.0

**Port Number**

Multiple applications are running on each node, and communications are carried out for each application between the nodes. Consequently, it is necessary to have a means to identify the application that data should be transferred to. The port number works as this identifier. Each port number is 16-bit data (from 0 to 65535).
The V9 series uses ports for screen program transfer (8001), PLC communication (as desired), and the simulator (8020). Set a unique number in the range of 1024 to 65535. For a PLC or a PC, set the port number in the range of 256 to 65535. It is recommended to set a greater number.

**Default Gateway**

A gateway and a router are used for communication between different networks.
The IP address of the gateway (router) should be set to communicate with the node(s) on other networks.

**Subnet Mask**

A subnet mask is used for dividing one network address into multiple networks (subnet).
The subnet is assigned by specifying a part of the host address in the IP address as a subnet address.

| Class B | 1 0 | Network address (14) | Host address (16) | |

| | 255. | 255. | 255. | 0 |
| Subnet Mask | 11111111 | 11111111 | 11111111 | 00000000 |
| | Network address | | Subnet address | Host address |

<Unavailable subnet masks>
- All bits are set to "0". ... 0.0.0.0
- All bits are set to "1". ... 255.255.255.255

## 4-2. Network Table Edit

The [Network Table Edit] tab window on the LAN Setting screen allows you to edit and add network tables.

[Network Table Edit] tab window



After changing the settings, press the [Apply] switch to confirm the settings.
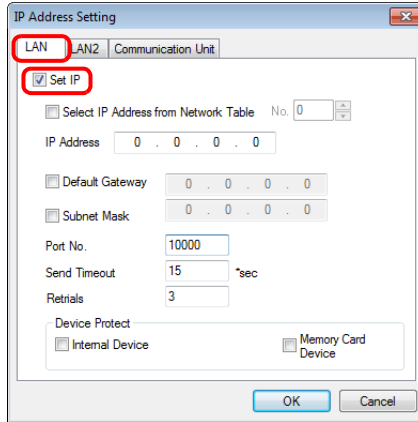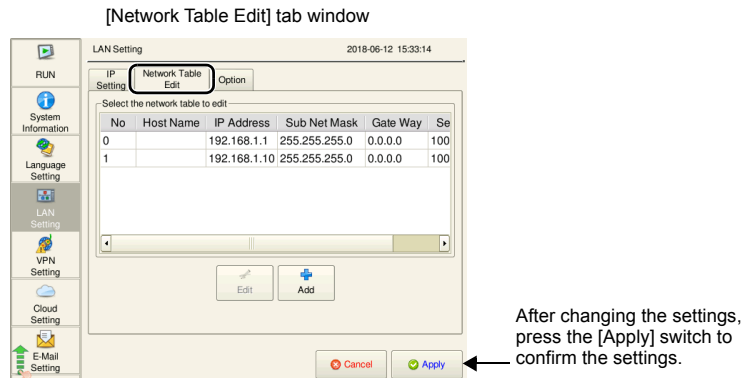
### Editing and Adding Network Tables

#### Editing a Network Table

1. Press [LAN Setting] in the menu icons and open the [Network Table Edit] tab window.

2. Select a network table to edit and press the [Edit] switch.
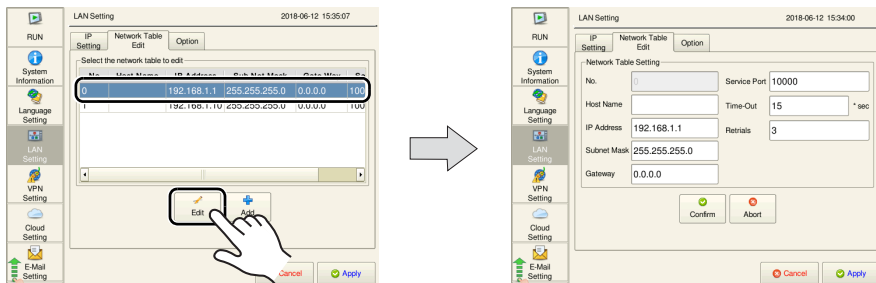


3. Press each item and input settings using the system keyboard. Then press the [Confirm] switch.

   * The network table number cannot be changed.



If a gateway is not used, leave the field blank.
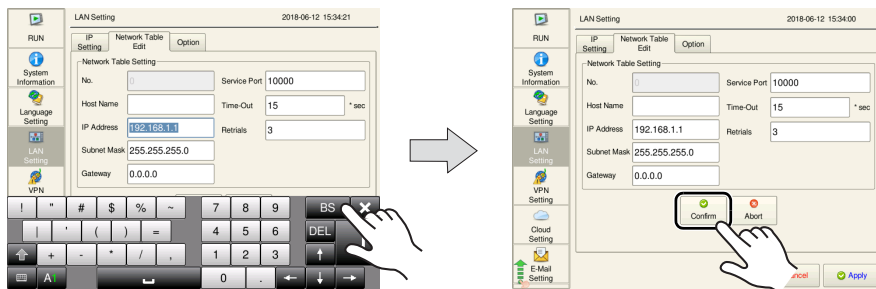
4.  Press the [Apply] switch to confirm the settings.
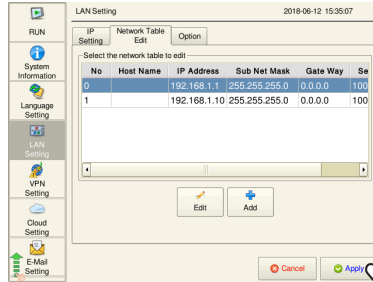


⚠️ When the [Select IP Address from Network Table] checkbox is selected and a network table number is specified at [System Setting] → [Ethernet Communication] → [Local Port Address], any attempt to modify the settings of the specified network table number from the V9 unit will not be reflected to the local port address settings ([IP Setting] tab window).

### Adding a Network Table

1.  Press [LAN Setting] in the menu icons and open the [Network Table Edit] tab window.

2.  Press the [Add] switch.
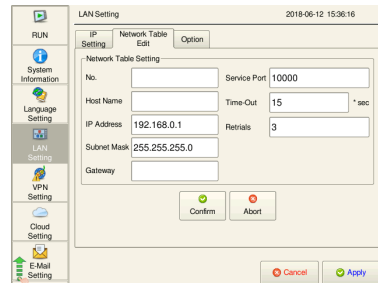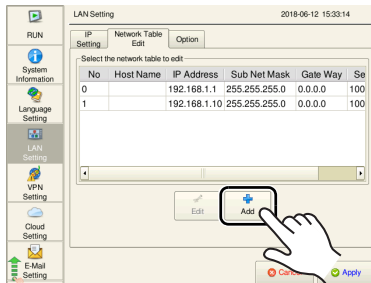


3.  Press each item and input settings using the system keyboard. Then press the [Confirm] switch.

    \*  Be sure to register a network table number.
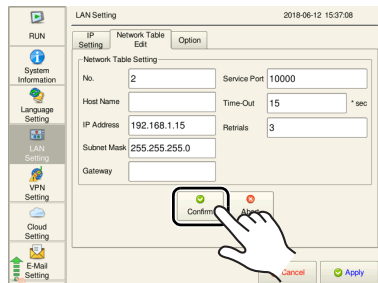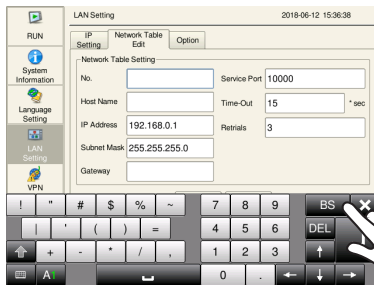


If a gateway is not used, leave the field blank.

4.   Press the [Apply] switch to confirm the settings.
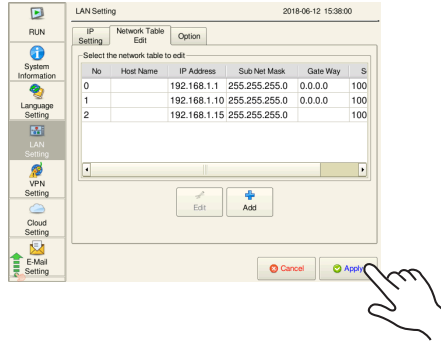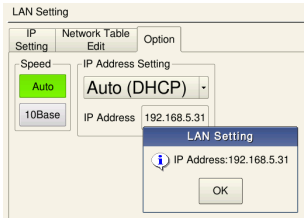


## 4-3.      Option

The [Option] tab window on the LAN Setting screen allows you to set the Ethernet speed and the IP address setting method.

[Option] tab window



After changing the setting, press the [Apply] switch to confirm the setting.

| Item | Description |
|---|---|
| Speed | Select [Auto] (default) to select the auto negotiation mode.<br>Select [10Base] to fix the communication mode to 10Base-T. |
| IP Address Setting | Select [Manual] (default) to manually set the IP address, subnet mask and gateway. Select [Auto (DHCP)] to automatically acquire the information necessary to establish an internet connection (IP address, subnet mask, and gateway) via the DHCP server (router etc.).<br>  *   This function can be used for either one of the LAN, LAN2, or WLAN settings.<br><br>When automatic allocation is successful, the allocated IP address is displayed.<br><br><br><br>After automatic allocation, the display and operation of items change as follows:<br>•  The IP address, subnet mask, and gateway settings on the [IP Setting] tab window are grayed out.<br>•  Network tables displayed on the [IP Setting] tab window cannot be selected.<br>•  Network tables cannot be edited or added on the [Network Table Edit] tab window. |

# 5.    LAN2 Setting (Only for Additional Wired LAN I/F Models)

Pressing [LAN2 Setting] in the menu icons brings up the LAN2 Setting screen.
This screen is used to set an IP address of the additional LAN port of the V9 series unit.

Menu icons                                    LAN2 Setting screen
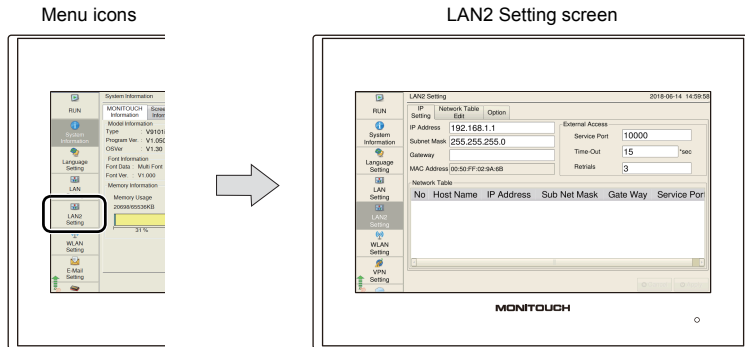


Details of the LAN2 Setting screen are the same as "LAN Setting" (page 2-12).

## 5-1.    IP Setting

This is the same as "IP Setting" (page 2-13) of "LAN Setting".
(The default IP address is "192.168.1.1".)

⚠️

- Set an IP address in a different network group from that for the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If set in the same network group, the system will not operate correctly.
- Set a gateway for only one of the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If multiple gateways are set, the system will not operate correctly.

## IP Address Setting for Additional Wired LAN

### Setting on the V9 Unit

This is the same as "IP Address Setting for the V9 Series" (page 2-14) of "LAN Setting".

### Setting Using the V-SFT Editor

1. Select [System Setting] → [Ethernet Communication] → [Local Port Address] on V-SFT.
   The [IP Address Setting] window is displayed.

2. Select the [Set IP] checkbox in the [LAN2] tab window, and set each item.

| | |
|---|---|
| ☐ Select IP Address from Network Table | This is valid when the IP address of the V9 series unit has been registered in the network table. Select a network table number from 0 to 255 to set the IP address. |
| IP Address * | Set the IP address for the additional LAN port of the V9 series unit. |
| ☐ Default Gateway * | Set the default gateway. |
| ☐ Subnet Mask * | Set the subnet mask.<br>When this box is not checked, the subnet mask is automatically assigned based on the first octet of the IP address.<br>Example:<br>IP address 172.16.200.185:   "255.255.0.0" is set.<br>IP address 192.168.1.185:    "255.255.255.0" is set. |
| ☐ Port No. * | Set a port number from 1024 to 65535.<br>("8001" is not available.) |
| Send Timeout | Set a timeout period for transmitting macro commands EREAD, EWRITE, SEND, MES or Ethernet DLL functions. |
| Retrials | 0 to 255<br>Set the number of retries to be performed when a timeout occurs. |
| Device Protect<br>    ☐ Internal Device<br>    ☐ Memory Card Device | Select these checkboxes to write-protect the corresponding device memory from PCs or other stations. |

   *  For details on the setting items, refer to page 2-16.

3. Click [OK].

4. Transfer the screen program to the V9 series unit.

5. Select the [Restore Screen Data Settings] switch in the [LAN2 Setting] → [IP Setting] tab window in Local mode, and press the [Apply] switch.

## 5-2.    Network Table Edit

This is the same as "Network Table Edit" (page 2-17) of "LAN Setting".

## 5-3.    Option

This is the same as "Option" (page 2-19) of "LAN Setting".

# 6. WLAN Setting (Only for Wireless LAN I/F Models)

Pressing [WLAN Setting] in the menu icons brings up the WLAN Setting screen.
This screen is used to configure wireless LAN settings for the V9 series unit.

* For details on general specifications and conformance standards for wireless LAN, refer to the V9 Series Hardware Specifications manual.

Menu icons          WLAN Setting screen
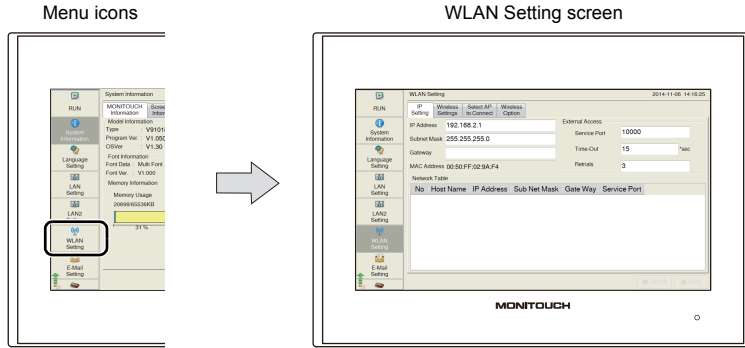


When the wireless LAN link is not established *, the [WLAN Setting] switch in the menu icons is changed as follows.

Link established          Link not established



* A link is not established in the following states.
  - The wireless LAN is turned off (disabled).
  - The wireless LAN is turned on (enabled) but a link is not established.
  - The wireless LAN is turned on (enabled) but not connected to the specified access point.

WLAN Setting screen
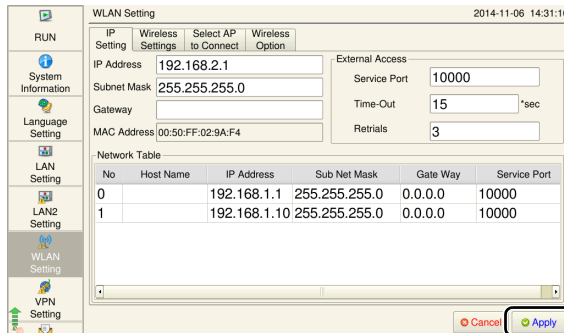


| Item | Description |
|------|-------------|
| Apply | Press the [Apply] switch on the WLAN Setting screen to save the settings on the [IP Setting], [Wireless Settings] and [Wireless Option] tab windows.<br><br>To save settings on the [Select AP to Connect] tab window, be sure to press the [Apply] switch in the [Select AP to Connect] tab window. |

## 6-1. IP Setting

The [IP Setting] tab window on the WLAN Setting screen allows you to set or change the IP address setting of the wireless LAN for the V9 series unit.

[IP Setting] tab window

Pressing each setting field brings up the system keyboard to be used for configuration.

Pressing each setting field brings up the system keyboard to be used for configuration.

| Item | | Description |
|---|---|---|
| IP Address [*1] | | Set the IP address for the V9 series unit. (Default: 192.168.2.1) |
| Subnet Mask [*1] | | Set the subnet mask. |
| Gateway [*1] | | Set the default gateway. <br> * If a gateway is not used, leave this field blank. (Do not use "0.0.0.0".) |
| MAC Address | | Indicates the MAC address of the V9 series unit. |
| External Access | Service Port [*1] [*2] | Set a port number of the V9 series unit (1024 to 65535). ("8001" is not available.) |
| | Time-Out [*2] | Set the timeout time. |
| | Retrials | 0 to 255 <br> Set the number of retries to be performed when a timeout occurs. |
| Network Table | | When a network table setting is set in the screen program, the contents of the network table are displayed. <br> Tap an IP address in the network table to select it. |

*1 For details on the setting items, refer to page 2-16.
*2 Used for macro commands of EREAD, EWRITE, SEND and MES as well as Ethernet DLL functions.

- Set an IP address in a different network group from that for the following:
    - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
    - [WLAN Setting] (only for wireless LAN I/F models)
    - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
    If set in the same network group, the system will not operate correctly.
- Set a gateway for only one of the following:
    - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
    - [WLAN Setting] (only for wireless LAN I/F models)
    - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
    If multiple gateways are set, the system will not operate correctly.
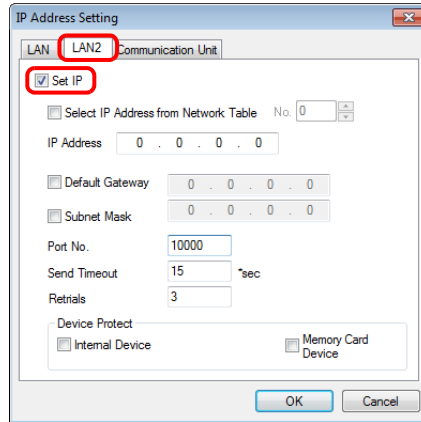
### IP Address Setting for Wireless LAN

Set the IP address on the V9 series unit.
The setting procedure is the same as "IP Address Setting for the V9 Series" (page 2-14) of "LAN Setting".

## 6-2.    Wireless Setting

The [Wireless Setting] tab window on the WLAN Setting screen allows you to set the wireless LAN operation mode and authentication method.

[Wireless Setting] tab window



| Item | | | Description |
|---|---|---|---|
| Status | | | Set whether to use (ON status) or not use (OFF status) wireless LAN. |
| Operation Mode | Access Point | | Select when setting the V9 series unit as a wireless LAN access point (base station). |
| | Station | | Select when setting the V9 series unit as a wireless LAN station (client). Connection will be established at the specified access point (infrastructure mode). |
| | Ad Hoc | | Select when setting the V9 series unit as a wireless LAN station (client). Instead of an access point, a connection is established between stations.<br>As ad-hoc specifications, only one device can be connected at one time. |
| Antenna | PCB | | Select to use the built-in antenna of the V9 series unit. |
| | External | | Use the optional "V9-ANT" antenna. |
| Channel | | | This setting is displayed when [Operation Mode] is set to [Access Point].<br>Select an access point channel.<br>(1 to 11) |
| SSID | | | When [Operation Mode] is set to [Access Point], set the SSID of the local station.<br>When [Operation Mode] is set to [Station] or [Ad-hoc], set the SSID of the connection target.<br>(within 32 alphanumeric characters) |
| Authentication | Open System | | Select the authentication method.<br>* When [Operation Mode] is set to [Ad-hoc], only [Open System] is available. |
| | WPA-PSK | | |
| | WPA2-PSK | | |
| | WPA-PSK/WPA2-PSK  Auto | | |
| Encryption Level | NONE | | This setting is available when [Authentication] is set to [Open System]. |
| | WEP | | |
| | TKIP | | This setting is available when [Authentication] is set to [WPA-PSK/WPA2-PSK]. |
| | AES | | |
| | TKIP/AES Auto | | This setting is available when [Authentication] is set to [WPA-PSK/WPA2-PSK Auto]. |
| Security Key | Key Index | 0 ~ 3 | This item can be set when [Encryption Level] is set to [WEP]. |
| | Key Format | Hexadecimal | Select the key format.<br>This item is not available when [Encryption Level] is set to [NONE]. |
| | | Text | |
| | Key field [1] | | Input a key according to the authentication method and encryption level.<br>This item is not available when [Encryption Level] is set to [NONE]. |
| | Confirmation Key [1] | | |

*1 The number of characters that can be input depends on the authentication method specified for the wireless LAN.
The following characters can be used.
- Hexadecimal:        0 to 9, A to F
- Text:                One-byte alphanumeric characters and symbols (case sensitive)

| Authentication | Encryption Method | Type | Key Format | Data Length |
|---|---|---|---|---|
| Open System | NONE | – | – | – |
| | WEP | WEP 64bit | Hexadecimal | 10 digits |
| | | | Text | 5 characters |
| | | WEP 128bit | Hexadecimal | 26 digits |
| | | | Text | 13 characters |
| WPA-PSK WPA2-PSK | TKIP | PSK | Hexadecimal | 64 digits |
| | AES | | Text | 8 to 63 characters |
| WPA-PSK/WPA2-PSK Auto | TKIP/AES Auto | PSK | Hexadecimal | 64 digits |
| | | | Text | 8 to 63 characters |

## 6-3.    Select AP to Connect

The [Select AP to Connect] tab window on the WLAN Setting screen allows you to display information of nearby access points and connect to an access point.
The SSID, key index and keys of up to 10 access points with which connection has been established before are stored.
(Note that access point information is not stored for connections where [Authentication] is set to [Open System] and [Encryption Level] is set to [NONE].)

 *  The [Select AP to Connect] tab window is available when [Operation Mode] is set to [Station] in the [Wireless Setting] tab window on the WLAN Setting screen.

[Select AP to Connect] tab window



Information of nearby access points is displayed.

## Setting the Access Point for Connection

1.  Press [WLAN Setting] in the menu icons and open the [Select AP to Connect] tab window.

2.  Press the [Search Nearby] switch.
    Information of nearby access points is displayed in descending order of signal strength.
    *   \*   For details on signal strength, refer to page 1-27.
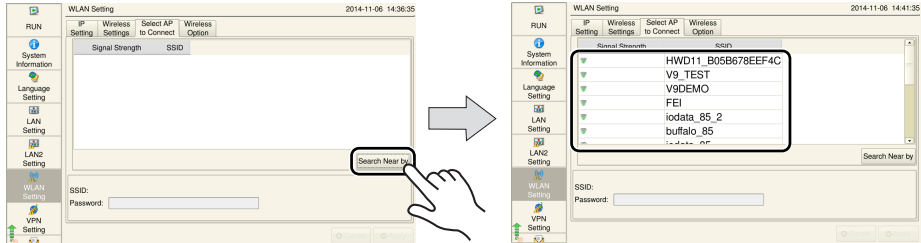


3.  Select the access point to connect to and set the key index and password as required.
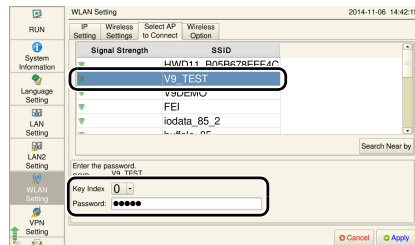


4.  Press the [Apply] switch to confirm the settings. Connection with the specified access point becomes possible.

> ⚠️   Be sure to press the [Apply] switch on the [Select AP to Connect] tab window.

## 6-4. Wireless Option

The [Wireless Option] tab window on the WLAN Setting screen allows you to configure wireless connection settings.

• When [Operation Mode] is set to [Access Point]

[Wireless Option] tab window



Pressing each setting field brings up the system keyboard to be used for configuration.

| Item | | Description |
|---|---|---|
| Wireless Mode | 802.11 n/g/b | Select the wireless mode. |
| | 802.11 g/b | |
| Max. Connecting Stations | 0 ~ 6 | Set the maximum number of stations that can be connected. |
| Beacon Transmission Interval | | Set the interval of beacon transmissions.<br>15 to 3000 msec (default: 100 msec) |
| DTIM Interval | | Set the interval for DTIM with respect to beacon transmissions.<br>1 to 255 (default:1) |
| IP Address Setting | | Select [Manual] (default) to manually set the IP address, subnet mask and gateway.<br>Select [Manual/DHCP server] to manually set the IP address, subnet mask and gateway. In addition, the V9 unit functions as a DHCP server and automatically allocates IP addresses to client devices requesting for allocation.<br><br> |

| | |
|---|---|
| Start address | Set the start IP address for allocating IP addresses to DHCP client devices. |
| Maximum number of DHCP Users | Set the maximum number of devices that can be allocated an IP address. |
| Lease time | Set the lease time of IP addresses allocated to DHCP client devices.<br>Setting range: 1 to 240 h |

• When [Operation Mode] is set to [Station]

[Wireless Option] tab window



Pressing each setting field brings up the system keyboard to be used for configuration.

| Item | Description |
|---|---|
| Beacon Receiving Interval | Set the interval of beacon transmissions. 15 to 3000 msec (default: 300 msec) |
| KeepAlive Transmission Interval | Set the interval of "KeepAlive" transmissions. 0 to 255 sec (default: 60 sec) |
| Delete AP Connection History | Deletes the information of stored access points. |
| IP Address Setting | Select [Manual] (default) to manually set the IP address, subnet mask and gateway. Select [Auto (DHCP)] to automatically acquire the information necessary to establish an internet connection (IP address, subnet mask, and gateway) via the DHCP server (router etc.). <br> * This function can be used for either one of the LAN, LAN2, or WLAN settings. <br><br> For details, refer to page 2-19. |

• When [Operation Mode] is set to [Ad-hoc]

[Wireless Option] tab window
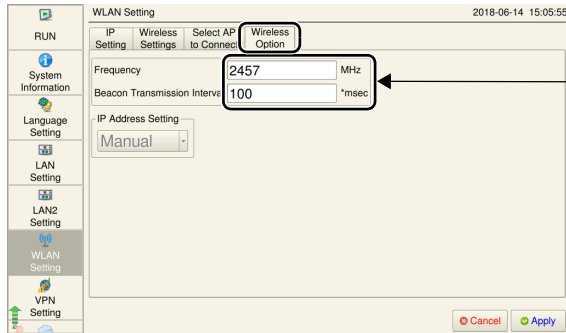


Pressing each setting field brings up the system keyboard to be used for configuration.

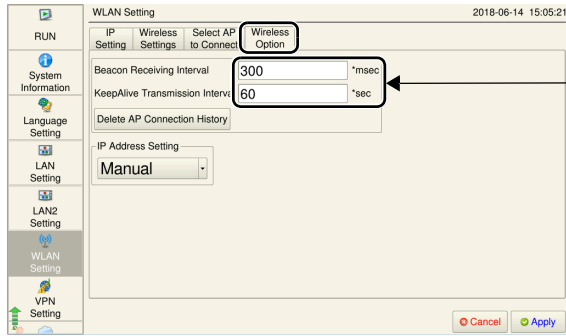| Item | Description |
|---|---|
| Frequency | Set the operation frequency when connecting to a specified client. (Default: 2457 MHz) |
| Beacon Transmission Interval | Set the interval of beacon transmissions. 15 to 3000 msec (default: 100 msec) |

# 7. LAN Unit Setting (Only with the CUR-03 Communication I/F Unit Installed)

Pressing [LAN Unit Setting] in the menu icons brings up the LAN Unit Setting screen.
This screen is used to set the IP address for the CUR-03 communication I/F unit installed on the V9 series unit.

Menu icons                                        LAN Unit Setting screen
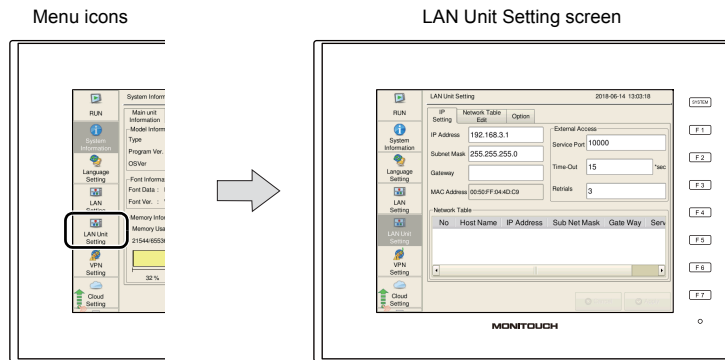
Details of the LAN Unit Setting screen are the same as "LAN Setting" (page 2-12).

## 7-1. IP Setting

This is the same as "IP Setting" (page 2-13) of "LAN Setting".
(The default IP address is "192.168.3.1".)

---

⚠️

- Set an IP address in a different network group from that for the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If set in the same network group, the system will not operate correctly.
- Set a gateway for only one of the following:
  - [LAN Setting] / [LAN2 Setting] (only for additional wired LAN I/F models)
  - [WLAN Setting] (only for wireless LAN I/F models)
  - [LAN Unit Setting] (only with the CUR-03 communication I/F unit installed)
  If multiple gateways are set, the system will not operate correctly.

---

### IP Address Setting for the LAN Unit

#### Setting on the V9 Unit

This is the same as "Setting on the V9 Unit" (page 2-14) of "LAN Setting".

#### Setting Using the V-SFT Editor

1. Select [System Setting] → [Ethernet Communication] → [Local Port Address] on V-SFT.
   The [IP Address Setting] window is displayed.

2. Select the [Set IP] checkbox in the [Communication Unit] tab window, and set each item.



| | |
|---|---|
| ☐ Select IP Address from Network Table | This is valid when the IP address of the V9 series unit has been registered in the network table. Select a network table number from 0 to 255 to set the IP address. |
| IP Address * | Set the IP address for the LAN unit of the V9 series unit. |
| ☐ Default Gateway * | Set the default gateway. |
| ☐ Subnet Mask * | Set the subnet mask. When this checkbox is not selected, the subnet mask is automatically assigned based on the first octet of the IP address. Example: IP address 172.16.200.185: "255.255.0.0" is set. IP address 192.168.1.185: "255.255.255.0" is set. |
| ☐ Port No. * | Set a port number from 1024 to 65535. ("8001" is not available) |
| Send Timeout | Set a timeout period for transmitting macro commands EREAD, EWRITE, SEND, MES or Ethernet DLL functions. |
| Retrials | 0 to 255 Set the number of retries to be performed when a timeout occurs. |
| Device Protect ☐ Internal Device ☐ Memory Card Device | Select these checkboxes to write-protect the corresponding device memory from PCs or other stations. |

\* For details on the setting items, refer to page 2-16.

3. Click [OK].

4. Transfer the screen program to the V9 series unit.

5. Select the [Restore Screen Data Settings] switch in the [LAN Unit Setting] → [IP Setting] tab window in Local mode, and press the [Apply] switch.

## 7-2. Network Table Edit

This is the same as "Network Table Edit" (page 2-17) of "LAN Setting".

## 7-3. Option

This is the same as "Option" (page 2-19) of "LAN Setting".

\* [IP Address Setting] is not displayed.

# 8. VPN Setting

Pressing [VPN Setting] in the menu icons brings up the VPN Setting screen.
This screen is used when connecting the V9 series unit to a VPN.
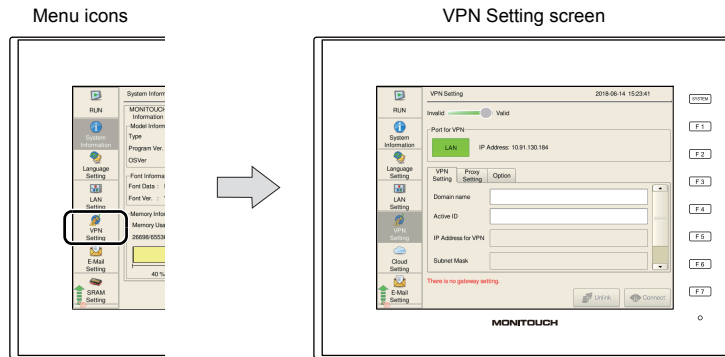
Menu icons                                                    VPN Setting screen



For details on VPN connection, refer to the separately provided "Web Machine Interface" manual.

# 9. Cloud Setting

Pressing [Cloud Setting] in the menu icons brings up the Cloud Setting screen.
This screen is used to configure settings necessary for using the cloud data service.

Menu icons                                                    Cloud Setting screen
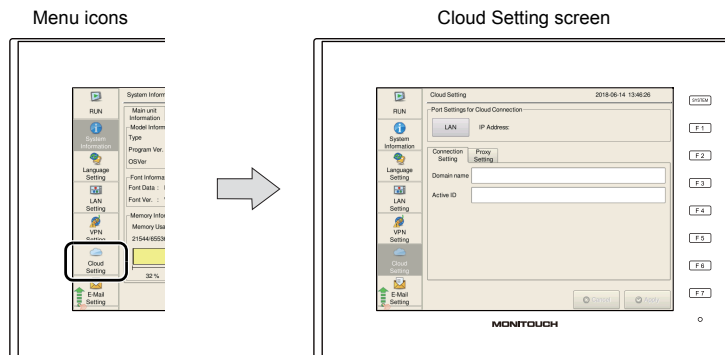


For details on the cloud data service, refer to the separately provided "Web Machine Interface" manual.

# 10.    E-Mail Setting

Pressing [E-Mail Setting] in the menu icons brings up the E-Mail Setting screen. This screen is used to view and configure connection settings and destination settings for sending e-mail notifications.

Menu icons                                          E-Mail Setting screen



E-Mail Setting screen



Press the [Apply] switch to confirm the setting.

| Item | Description |
|------|-------------|
| Restore Screen Data Settings | Returns the e-mail settings made on the V9 series unit to those set in the screen program.<br>When the [Restore Screen Data Settings] switch is pressed, settings made in the [Connection Setting] and [Mail Setting] tab windows are canceled, and those in the screen program are restored.<br>  *   When settings are restored, the changes made on the unit are cancelled.<br><br>For details on the handling of a screen program changed in Local mode, refer to page 2-81. |

# 10-1. Connection Setting

The [Connection Setting] tab window on the E-Mail Setting screen allows you to configure connection settings for sending e-mail notifications.
When e-mail settings have been configured using V-SFT version 6, the settings in the screen program are displayed.

[Connection Setting] tab window



Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | Description |
|---|---|---|
| SMTP IP Address | | Set the IP address of the mail server on the network. |
| Port No. | | Set the SMTP port number.<br>(Default: 25)<br><br>When using SSL/TLS communication, set "465" for the port number. |
| Authentication | No Authentication | No authentication is performed. |
| | POP before SMTP | Authentication is performed with the POP3 server. Configure the following settings.<br>• POP3 IP address<br>• Account name (within 63 one-byte characters)<br>• Password (within 63 one-byte characters) |
| | SMTP-AUTH | Authentication is performed with the SMTP server. Configure the following settings.<br>• Selecting or deselecting the [Use SSL/TLS Communication] checkbox<br>• Account name (within 63 one-byte characters)<br>• Password (within 63 one-byte characters) |
| POP3 IP Address | | Displayed when [Authentication: POP before SMTP] is selected. Set the POP3 IP address. |
| Use SSL/TLS Communication | | Displayed when [Authentication: SMTP-AUTH] is selected. Select this checkbox when using SSL/TLS communications. |
| Account Name | | Set an account name used for connecting to the POP3 server or SMTP server. |
| Password | | Set a password used for connecting to the POP3 server or SMTP server. |

\* For details on e-mail notifications, refer to the V9 Series Reference Manual 2.

## 10-2.    Mail Setting

The [Mail Setting] tab window on the E-Mail Setting screen allows you to configure destination settings for sending e-mail notifications.
When e-mail settings have been configured using V-SFT version 6, the settings in the screen program are displayed.

[Mail Setting] tab window



Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the setting, press the [Apply] switch to confirm the setting.
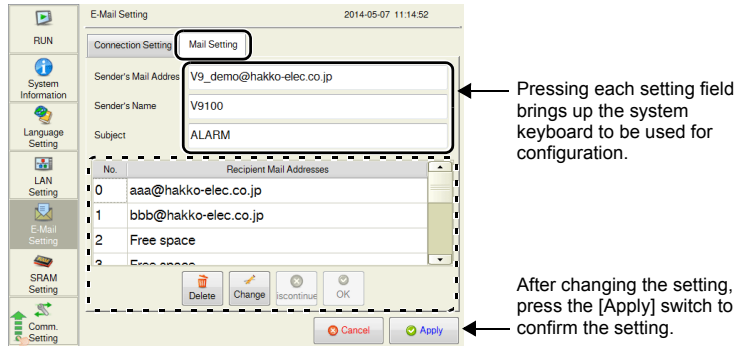
| Item | Description |
|------|-------------|
| Sender's Mail Address | Set the sender's mail address.<br>It is recommended to create a dedicated account for the V9 series unit on the mail server and to set its address here. |
| Sender's Name | Set the sender's name. A name can only consist of either one- or two-byte characters; not both.<br>It is displayed in the "Sender" field in an incoming e-mail. |
| Subject | Set the subject.<br>It is displayed in the "Subject" field in an incoming e-mail. |
| Recipient Mail Addresses | Max. 8 addresses<br>Register all mail addresses to receive notifications from the V9 series unit. |

\*   For details on e-mail notifications, refer to the V9 Series Reference Manual 2.

### Editing the Recipient Mail Addresses

1.   Press [E-Mail Setting] in the menu icons and open the [Mail Setting] tab window.

2.   Select a mail address to edit and press the [Change] switch.
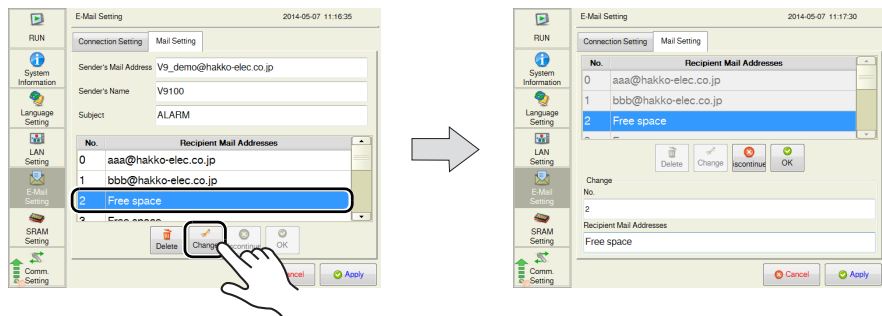
3.  Pressing each setting field brings up the system keyboard to be used for configuration.
    Set the recipient mail address.
    When [No.] is changed, the set address is copied to the selected number.
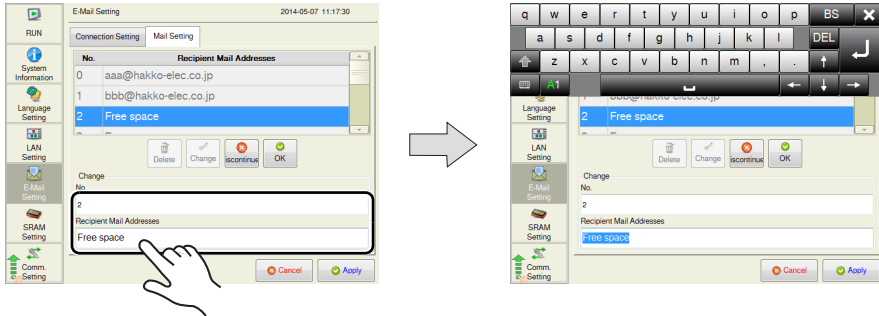


4.  Press the [OK] switch and then the [Apply] switch. The changed address takes effect.
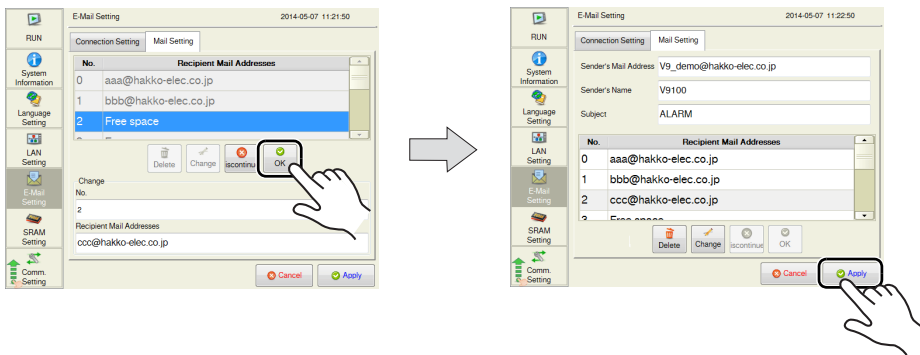


## Deleting the Recipient Mail Addresses

1.  Press [E-Mail Setting] in the menu icons and open the [Mail Setting] tab window.

2.  Select a mail address to delete and press the [Delete] switch.
    Press the [Apply] switch to confirm the setting.
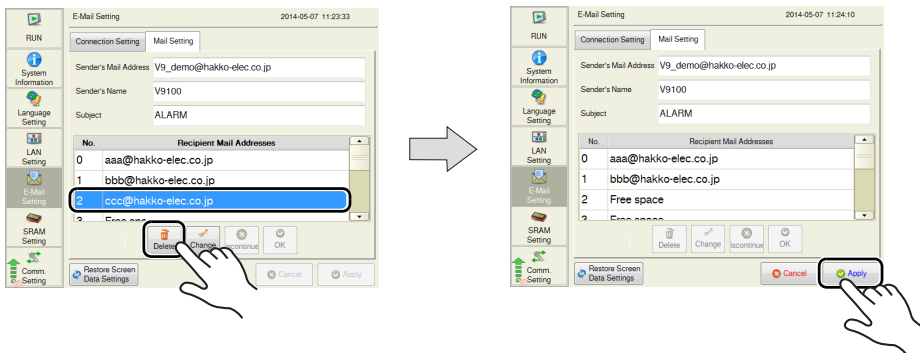
# 11.    SRAM Setting

Pressing [SRAM Setting] in the menu icons brings up the SRAM Setting screen.
This screen is used to format the SRAM area in the V9 series unit.

Menu icons                                         SRAM Setting screen
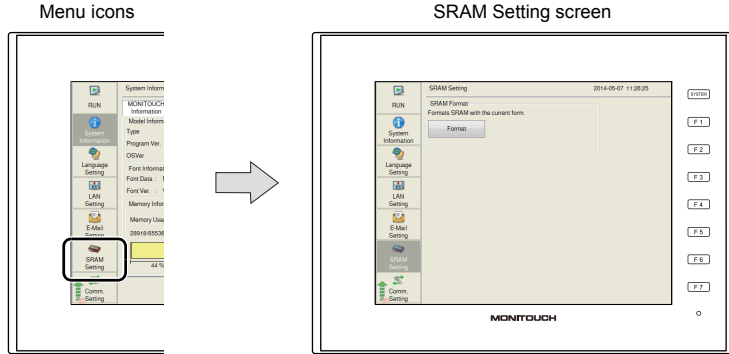


If the SRAM area allocated in the V9 series unit is different from the one configured in the [SRAM/Clock Setting] window of V-SFT version 6, the [SRAM Setting] menu icon is changed as shown below.

* The ⚠ icon also appears when the SRAM area is occupied, the battery becomes weak or no battery is set.

When the format matches:                    When the format differs:
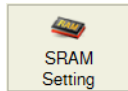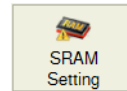


SRAM Setting screen
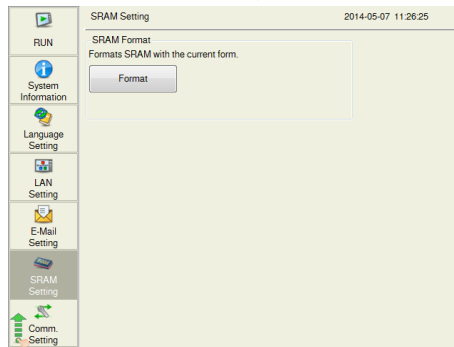


| Item | | Description |
|---|---|---|
| SRAM Format [*1] | Format | Formats the SRAM area.<br>For details on the formatting procedure, refer to page 2-38. |

*1   When using the SRAM area, be sure to set a battery. Otherwise, the contents in the SRAM area cannot be retained.

## Formatting SRAM

An SRAM area can be formatted.
When the SRAM area is formatted, any saved data (history data saved in SRAM, internal device memory $L, etc.) is completely cleared. Double-check before formatting the SRAM.

1.  Press [SRAM Setting] in the menu icons. The SRAM Setting screen is displayed.

2.  Press the [Format] switch and the [Execute] switch.
    The SRAM area is formatted in the format specified in the current screen program.
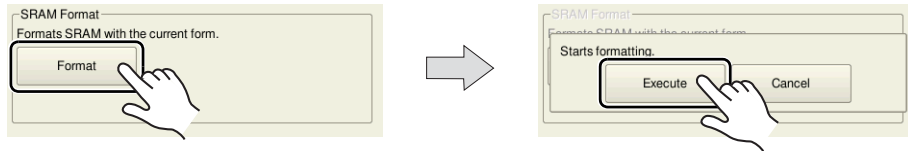


3.  When formatting has been completed, the message "Format completed." is displayed.
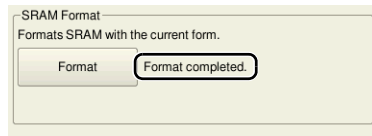
# 12.    Communication Setting

Pressing [Comm. Setting] in the menu icons brings up the Communication Setting screen.
This screen is used to view and configure communication parameters.

Menu icons                                    Communication Setting screen



Communication Setting screen



Indicates the maker, model, and connection port of PLCx.

Changes over the display between PLC1 to PLC8.

Press the [Restore Screen Data Settings] switch to return the settings to those set in the screen program.

| Item | | Description |
|---|---|---|
| PLC1 - PLC8 Communication Setting | Maker | Indicates the maker of the connected device. |
| | Model | Indicates the model of the connected device. |
| | Target Port No. | Indicates the specified connection port. |
| << | | Changes over the display of the communication settings between PLC1 to PLC8. |
| >> | | If only PLC1 is used, the display cannot be changed over. |
| Restore Screen Data Settings | | Restores communication settings that were changed on the V9 series unit to those set in the screen program. For details, refer to page 2-40. |
| | | *   When settings are restored, the changes made on the unit are cancelled. |
| | | For details on data changed in Local mode, refer to page 2-81. |

*   The model and connection port cannot be changed on the V9 series unit.

## Restoring Settings in the Screen Program

This section explains how to restore the screen program settings after the communication settings were changed on the V9 series unit.

1. Press [Comm. Setting] in the menu icons. The Communication Setting screen is displayed.

2. To restore a specific communication parameter for PLCx, press [<<] and [>>] switches to select the connected device targeted for restoration.
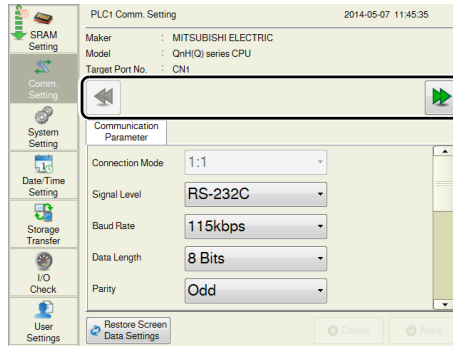


3. Press the [Restore Screen Data Settings] switch. The following dialog box appears.
To restore the screen program settings for only the currently displayed PLCx, press the [Reset PLCx Only] switch. To restore for all PLCs 1 to 8, press the [Reset All] switch.

   * When restored, changes made on the V9 series unit are cancelled.
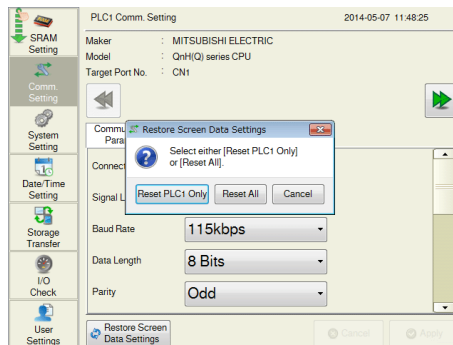


4. Communication settings are refreshed and the [System Information] screen is displayed.

**2**

*Local Mode Screen*

## 12-1.    Communication Parameter

The [Communication Setting] tab window on the Communication Setting screen allows you to view and configure parameters for the connected devices.

[Communication Parameter] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Indicates communication parameters of PLCx. Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the setting, press the [Apply] switch to confirm the setting.

| Item | Description |
|---|---|
| Connection Mode | |
| Signal Level | |
| Baud Rate | |
| Data Length | |
| Parity | |
| Stop Bit | |
| Stat. No. | |
| Local Port No. | Displays the communication parameters of PLCx. |
| Time-Out | Press an item to change the communication parameter on the V9 series unit. [1] |
| Retrials | For details, refer to the V9 Series Connection Manual. |
| Send Delay Time | |
| Start Time | |
| Comm. Port No. | |
| Code | |
| Text Process | |
| Comm. Error Handling | |
| Recovery Condition | |

*1    The connection mode cannot be changed on the V9 series unit.

## 12-2. Connection Target Setting

The [Connection Target Setting] tab window on the Communication Setting screen allows you to view and change the IP address and port number of the connected device.

* The [Connection Target Setting] tab window is displayed only when Ethernet connection is used.

[Connection Target Setting] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | Description |
|---|---|---|
| Target *1 | No | Displays the number of the connection target. (Cannot be changed.) |
| | Host Name | Displays the station name set in the screen program. (Cannot be changed.) |
| | IP Address | Set the IP address for the connected device. |
| | Port No. | Set the port number of the connected device. |

*1 When the connection mode is 1:1, only the connected device is displayed.
When it is 1:n, all devices set in the PLC table in V-SFT version 6 are displayed.
Addition or deletion of a connected device is not possible.

## 12-3. Individual Parameter

The [Individual Parameter] tab window on the Communication Setting screen allows you to configure detailed communication settings.

* [Use Port No. Table] and [Node Address] are not displayed.

[Individual Parameter] tab window

After changing the setting, press the [Apply] switch to confirm the setting.
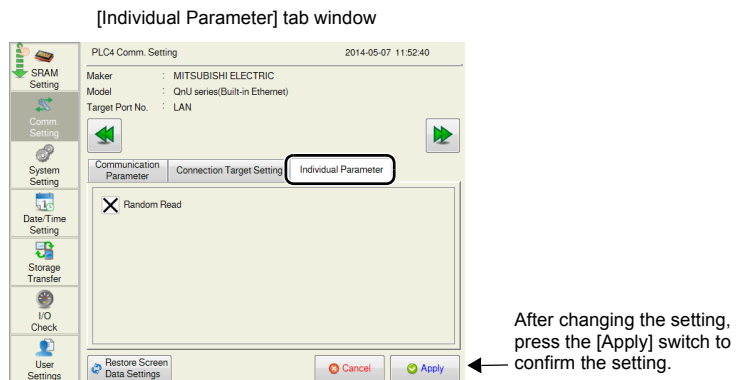
| Item | Description |
|---|---|
| Transmission Mode | Displayed only when a PLC of Mitsubishi Electric, OMRON, Hitachi Industrial Equipment System, Yokogawa Electric, JTEKT, or Yaskawa Electric is selected. For details, refer to the V9 Series Connection Manual. |
| Read Multiple Blocks at One Time | Displayed when a PLC of Mitsubishi Electric is selected. For details, refer to the V9 Series Connection Manual. |
| Random Read | |

**2**

## 12-4.  Communication I/F Unit Parameters

The [Communication I/F Unit Parameters] tab window on the Communication Setting screen allows you to view and change settings regarding communication I/F units. (Not all communication I/F units allow setting changes.)

*   The [Communication I/F Unit Parameters] tab is displayed only when a communication I/F unit is specified for connection.

For details, refer to the respective V9 Series Communication Unit Specifications.

## 12-5.  Multi-Link

The [Multi-Link] tab window on the Communication Setting screen allows you to view and configure multi-link settings.

*   The [Multi-Link] tab window is available only when the connection mode is multi-link.

[Multi-Link] tab window



Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

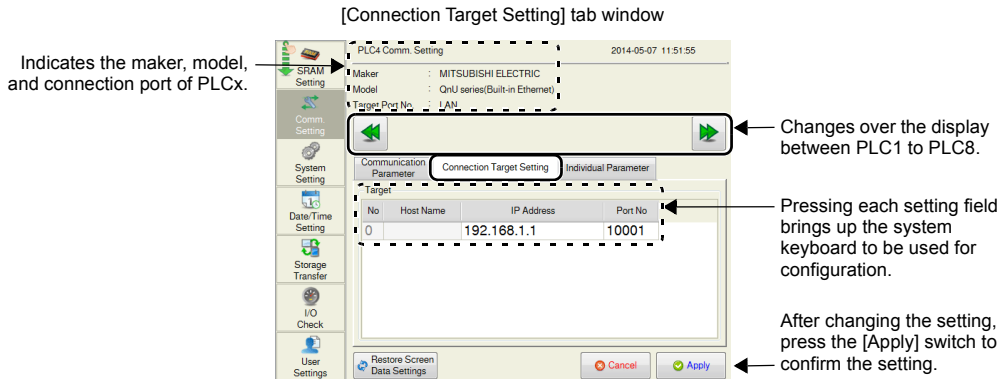After changing the settings, press the [Apply] switch to confirm the settings.
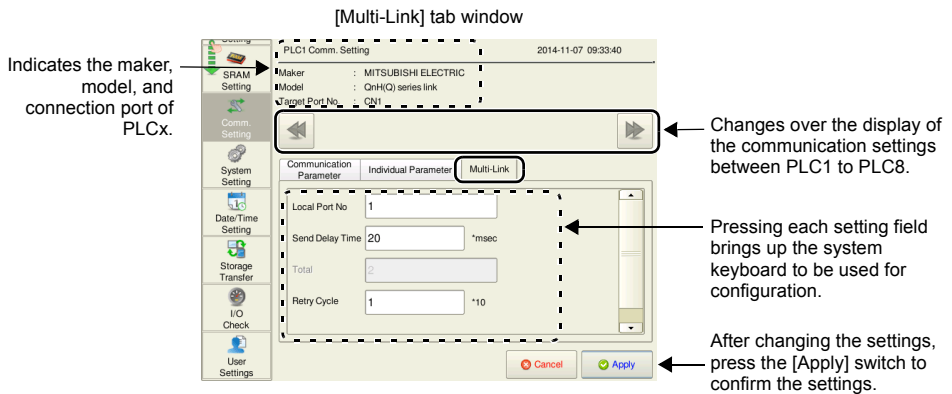
| Item | Description |
|---|---|
| Local Port No. | Displays the local port number of the V9 series unit. Set within the total number of V9 series units.<br>Note that if the port number specified is the same as that already set for another V9 unit, the system will not operate correctly. |
| Send Delay Time [*] | Specify a delay time that elapses before the V9 unit sends the next command after receiving data from the PLC. |
| Total [*] | Displays the total number of V9 units connected in multi-link connection. (Cannot be changed.) |
| Retry Cycle [*] | When a V9 series unit has a problem, it is temporarily removed from the communication targets, and an inquiry for restoration is sent every number of cycles specified by this setting. |

*   For [Send Delay Time], [Total] and [Retry Cycle], the same values must be set on all the V9 series units that are connected in the same communication line.

## 12-6.    Multi-Link2

The [Multi-Link2] tab window on the Communication Setting screen allows you to view and configure multi-link2, multi-link2 (Ethernet), and 1 : n multi-link2 (Ethernet) settings.

  \* The [Multi-Link2] tab window is available only when the connection mode is multi-link2, multi-link2 (Ethernet), or 1 : n multi-link2 (Ethernet).

### Multi-link2

• For the master station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|------|-------------|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of the master station is "1". (Cannot be changed.) |
| Send Delay Time | Specify a delay time that elapses before the V9 series unit sends the next command after receiving data from the PLC. Normally use the default setting (0). |
| Total | Displays the total number of V9 units connected in multi-link2 connection. (Cannot be changed.) |
| Retry Cycle | Set the cycle interval at which the master station sends an inquiry for restoration to a slave that has encountered a problem and is disconnected. |
| Baud Rate | Displays the baud rate for between V9 series units. (Cannot be changed.) |
| Target Port No. | Displays the port for connecting to the slave station. (Cannot be changed.) |

• For a slave station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|---|---|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of a slave station is from "2" to "4". Set within the total number of V9 series units.<br>Note that if the port number specified is the same as that already set for another V9 unit, the system will not operate correctly. |
| Total | Displays the total number of V9 units connected in multi-link2 connection. (Cannot be changed.) |
| Baud Rate | Displays the baud rate for between V9 series units. (Cannot be changed.) |

## Multi-link2 (Ethernet)

• For the master station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|---|---|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of the master station is "1". (Cannot be changed.) |
| Send Delay Time | Specify a delay time that elapses before the V9 series unit sends the next command after receiving data from the PLC. Normally use the default setting (0). |
| Total | Displays the total number of V9 units connected in multi-link2 (Ethernet) connection. (Cannot be changed.) |
| Retry Cycle | Set the cycle interval at which the master station sends an inquiry for restoration to a slave that has encountered a problem and is disconnected. |
| Comm. Port No. | Set the port number for multi-link2 (Ethernet) communication.<br>*　Set the same port number for all master and slave stations. |
| Target | Set the IP addresses of all V9 units used as slave to respective local port numbers. |

• For a slave station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|---|---|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of a slave station is from "2" to "32". Set within the total number of V9 series units.<br>Note that if the port number specified is the same as that already set for another V9 unit, the system will not operate correctly. |
| Total | Displays the total number of V9 units connected in multi-link2 (Ethernet) connection. (Cannot be changed.) |
| Comm. Port No. | Set the port number for multi-link2 (Ethernet) communication.<br>*  Set the same port number for all master and slave stations. |
| Target | Set the IP address of the master V9 for No. 1. |

# 1 : n Multi-link2 (Ethernet)

• For the master station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|---|---|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of the master station is "1". (Cannot be changed.) |
| Send Delay Time | Specify a delay time that elapses before the V9 series unit sends the next command after receiving data from the PLC. Normally use the default setting (0). |
| Total | Displays the total number of V9 units connected in 1 : n multi-link2 (Ethernet) connection. (Cannot be changed.) |
| Retry Cycle | Set the cycle interval at which the master station sends an inquiry for restoration to a slave that has encountered a problem and is disconnected. |
| Comm. Port No. | Set the port number for 1 : n multi-link2 (Ethernet) communication.<br>*  Set the same port number for all master and slave stations. |
| Target | Set the IP addresses of all V9 units used as slave to respective local port numbers. |

• For a slave station

[Multi-Link2] tab window

Indicates the maker, model, and connection port of PLCx.

Changes over the display of the communication settings between PLC1 to PLC8.

Pressing each setting field brings up the system keyboard to be used for configuration.

After changing the settings, press the [Apply] switch to confirm the settings.

| Item | Description |
|------|-------------|
| Local Port No. | Displays the local port number of the V9 series unit. The port number of a slave station is from "2" to "32". Set within the total number of V9 series units.<br>Note that if the port number specified is the same as that already set for another V9 unit, the system will not operate correctly. |
| Total | Displays the total number of V9 units connected in 1 : n multi-link2 (Ethernet) connection. (Cannot be changed.) |
| Comm. Port No. | Set the port number for 1 : n multi-link2 (Ethernet) communication.<br>*  Set the same port number for all master and slave stations. |
| Target | Set the IP address of the master V9 for No. 1. |

# 13. Simulator Setting

Pressing [Simulator Setting] * in the menu icons brings up the Simulator Setting screen.
This screen is used to show the information of the simulator to use, and select whether or not to use the simulator.

\* [Simulator Setting] is displayed only when [Use Simulator] is selected in the [Transfer] window of V-SFT version 6.

Menu icons                              Simulator Setting screen



Simulator Setting screen



Pressing each setting field brings up the system keyboard to be used for configuration.

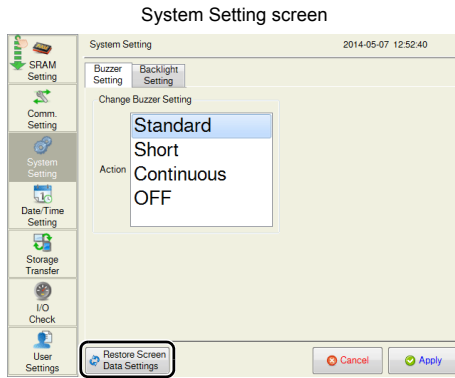After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | Description |
|---|---|---|
| Simulator Information | Simulator Version | Indicates the version of the simulator program. |
| | Comm. Mode | Indicates the simulator communication mode.<br>　Serial:　　MJ1 (Serial)<br>　USB:　　　USB-B (Device)<br>　Ethernet:　Ethernet (UDP) |
| | IP Address | Displayed only when [Comm. Mode: Ethernet (UDP)] is selected.<br>Set the IP address for the connected PC.<br>(Default: 192.168.1.201) |
| | Service Port | Displayed only when [Comm. Mode: Ethernet (UDP)] is selected.<br>Set the port number for the simulator.<br>(Default: 8020)<br>Set the same number as the one set for [File] → [Communication Setting] → [Port No.] in the [Simulator] window. |
| PLC1 to 8 | Maker | Indicates the maker of the connected device. |
| | Model | Indicates the model of the connected device. |
| | Not Use (Actual Machine) / Use | Select whether or not to use the simulator as a substitute for the actual equipment.<br>Not Use (Actual Machine):　Performs communication with an actual machine.<br>Use:　　　　　　　　　　　Performs communication using the simulator. |

**2**

Local Mode Screen

## 14.    System Setting

Pressing [System Setting] in the menu icons brings up the System Setting screen.
This screen is used to change the settings for the buzzer and backlight.

Menu icons                                    System Setting screen



System Setting screen



Press the [Apply] switch
to confirm the setting.

| Item | Description |
|---|---|
| Restore Screen Data Settings | Returns the buzzer or backlight settings made on the V9 series unit to those set in the screen program.<br>When this switch is pressed while the [Buzzer Setting] or [Backlight Setting] tab window is open, settings in the current tab window are cancelled and those in the screen program are restored.<br>  * When settings are restored, the changes made on the unit are cancelled.<br><br>For details on the handling of a screen program changed in Local mode, refer to page 2-81. |

## 14-1.    Buzzer Setting

The [Buzzer Setting] tab window on the System Setting screen is used to change the buzzer sound.

[Buzzer Setting] tab window
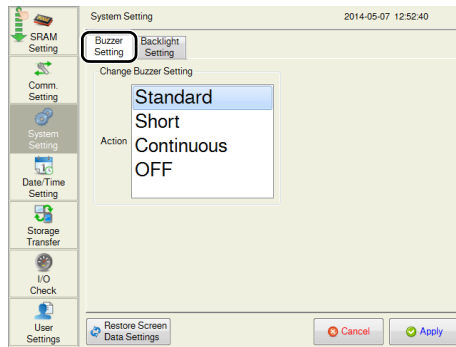
After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | Description |
|---|---|---|
| Change Buzzer Setting | Standard | Changes the buzzer sound. |
| | Short | |
| | Continuous | |
| | OFF | |

## 14-2.    Backlight Setting

The [Backlight Setting] tab window on the System Setting screen is used to change the backlight control setting.

[Backlight Setting] tab window

After changing the setting, press the [Apply] switch to confirm the setting.

| Item | | | Description |
|---|---|---|---|
| Change Backlight Setting | Action | Always ON | Changes the backlight control setting. For details on the difference between these actions, refer to the V9 Series Reference Manual 1. |
| | | AUTO 1 | |
| | | AUTO 2 | |
| | | AUTO 3 | |
| | | Manual | |
| Backlight OFF Time | | | This item can be set only when [Auto 1], [Auto 2], or [Auto 3] is selected. Set the time to elapse until the backlight is turned off. |
| Control during Backlight Power ON | | | This item can be set only when [Manual] is selected. Select the backlight status when the power is turned on and when the operation mode is changed from STOP to RUN. |

## 15.     Date/Time Setting

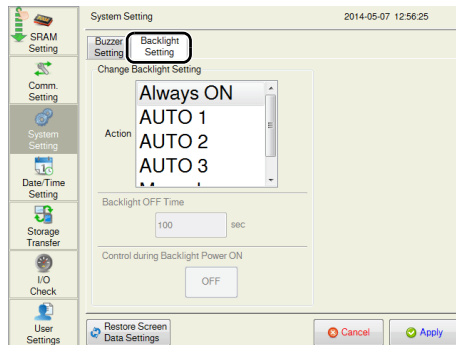Pressing [Date/Time Setting] in the menu icons brings up the Date/Time Setting screen. This screen is used to correct the date and time of the built-in clock in the V9 series unit. [*1]
Set whether to use the built-in clock in the V9 series unit or the clock in the PLC by selecting [System Setting] → [Unit Setting] → [SRAM/Clock] → [SRAM/Clock Setting] → [Use SRAM Calendar] on V-SFT version 6.

Menu icons                          Date/Time Setting screen
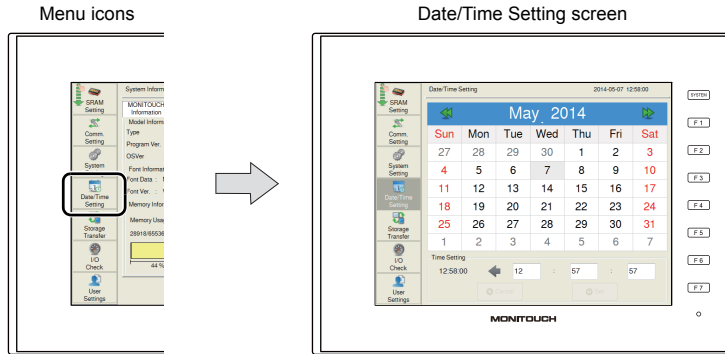


*1    When using the built-in clock, be sure to set a battery. Otherwise, the clock time cannot be retained.

### Date Setting

1.  Press [Date/Time Setting] in the menu icons. The Date/Time Setting screen is displayed.

2.  Select the date and month in the calendar.

    •  When changing the date:
       Select the date to set on the calendar.
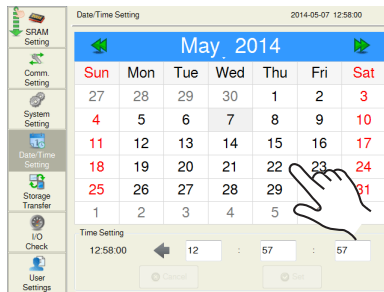


    •  When changing the month:
       Switch the month using the [<<] and [>>] switches at the top of the calendar, or press the month portion to display the pull-down list for months, and select a month to set.
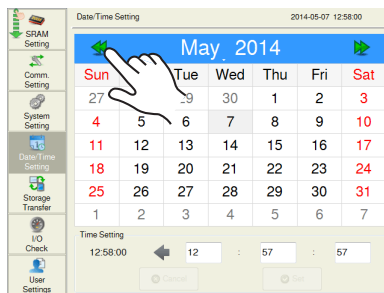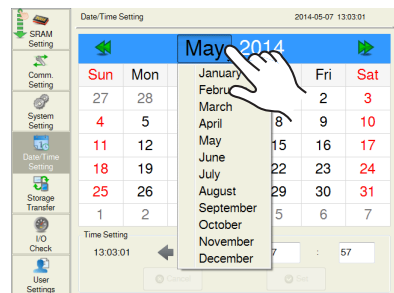
- When changing the year:
  Press the year portion on the calendar and select a year to set using the [↑] and [↓] switches. When a position other than the [↑] and [↓] switches is pressed, the calendar is changed to the set year.
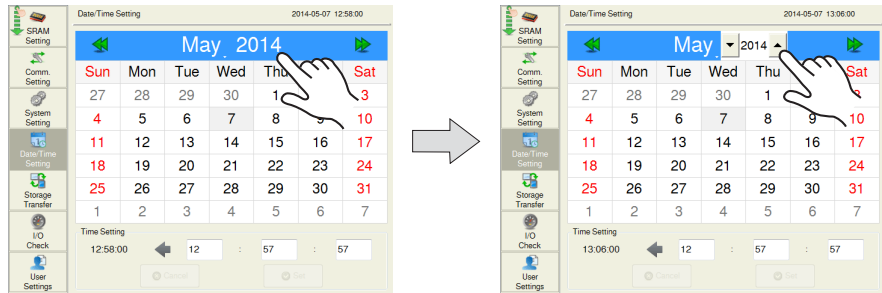


3. Press the [Set] switch to confirm the setting. The date displayed on the top right is modified.

**2**

Local Mode Screen
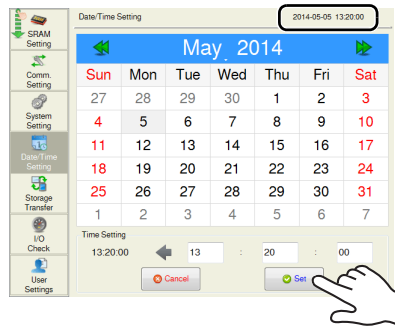
## Time Setting

1. Press [Date/Time Setting] in the menu icons. The Date/Time Setting screen is displayed.

2. Press the time setting field. The system keyboard appears. Input a time to set.

3. Press the [Set] switch to confirm the setting. The clock displayed on the top right is modified.

# 16. Storage Transfer

Pressing [Storage Transfer] in the menu icons brings up the Storage Transfer screen.
This screen is used for transferring data such as screen programs between the V9 series unit and the storage device.

Menu icons                                    Storage Transfer screen
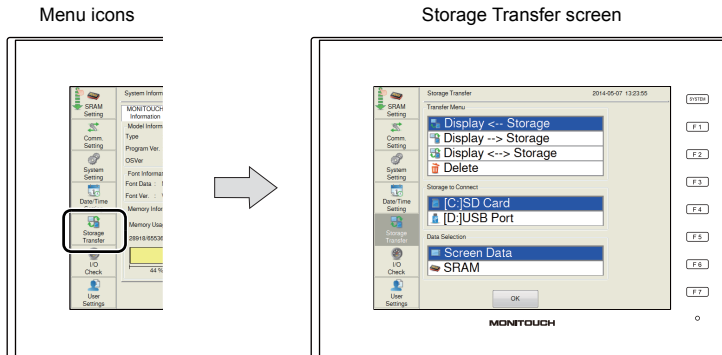


Storage Transfer screen



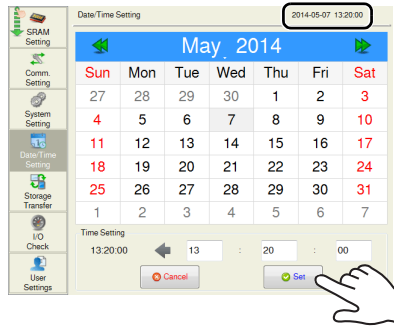| Item | | Description |
|---|---|---|
| Transfer Menu | Display ← Storage | Transfers data from a storage device to the V9 series unit. |
| | Display → Storage | Transfers data from the V9 series unit to a storage device. |
| | Display ↔ Storage | Compares stored data between the V9 series unit and a storage device. |
| | Delete | Deletes data from a storage device. |
| Storage to Connect | [C:] SD Card [*] | Select to access an SD card inserted into the SD card slot on the V9 series unit. |
| | [D:] USB Port [*] | Select to access a USB flash drive connected to the USB-A port on the V9 series unit. |
| Data Selection | Screen Data | Select when transferring the screen program to/from the storage device. |
| | SRAM | Select when backing up data from the SRAM area in MONITOUCH to a storage device before battery replacement or when uploading data from a storage device to SRAM. |

\* Displayed only when a storage device is connected.

**2**

## 16-1.    Storage Folder Configuration

The table below lists folder names, contents, and file names.
For details, refer to the V9 Series Reference Manual 2.

Storage (SD card/USB flash drive)

EXT0000 (access folder name: user-definable within 64 one-byte uppercase alphanumeric characters)

| Folder Name (fixed) | Contents | File Name | Transfer Direction |
|---|---|---|---|
| ALARM | Alarm history | ALARM00.BIN - ALARM11.BIN [1]<br>ALARM00.BIN-journal -<br>      ALARM11.BIN-journal [2]<br>EVENT00.BIN - EVENT11.BIN [1]<br>EVENT00.BIN-journal -<br>      EVENT11.BIN-journal [2]<br>ALARM_aa_bb.CSV [1]<br>(aa: block No., bb: No.)<br>(filename).CSV [1] [3] | V9 ← Storage [5]<br>V9 → Storage |
| BITMAP | Pattern data | BMP0000.BIN ~ BMP1023.BIN | V9 ← Storage |
| DSP | Screen program | DSP0000.BIN | V9 ← Storage<br>V9 → Storage |
| HDCOPY | Hard copy image | HD0000.PNG - HD9999.PNG<br>HD000~yy.PNG - HD999~yy.PNG<br>(filename).PNG [3] | V9 → Storage |
| JPEG | JPEG file | JP00000.JPG - JP32767.JPG<br>(filename).JPG [3] | V9 ← Storage |
| LIST | Data sheet output in PDF format | LISTxxxx.PDF [4]<br>(filename)xxxx.PDF [3] [4]<br>(xxxx: Top page number) | V9 → Storage |
| LOGGING | Logging data | LOGGING00.BIN - LOGGING.11BIN [1]<br>LOGGING00.BIN-journal -<br>      LOGGING11.BIN-journal [2]<br>LOGGING_aa_bb.CSV [1]<br>(aa: block No., bb: No.)<br>(filename).CSV [1] [3] | V9 ← Storage [5]<br>V9 → Storage |
| MEMO | Memo pad data | MEM0000.PNG - MEM0007.PNG | V9 → Storage |
| MSG | Message file | MSGxxyyy.BIN<br>MSGxxyyy.TXT | V9 ← Storage |
| OPELOG | Operation log file | OPELOG_hhmmss.DB | V9 ← Storage<br>V9 → Storage |
| RECIPE | Recipe data | REC0000.CSV - REC9999.CSV<br>(filename).CSV [3]<br>REC0000.BIN - REC9999.BIN<br>(filename).BIN [3] | V9 ← Storage<br>V9 → Storage |
| SCRN | Header file | SCHEADER.BIN | V9 ← Storage |
| | Screen file | SC0000.BIN - SC9999.BIN | |
| | Component part (macro blocks) | MCR0000.BIN - MCR1023.BIN | |
| | Component part (messages) | MSG0000.BIN - MSG0011.BIN | |
| | 3D part file | 3D0001.BIN - 3D1023.BIN | |
| | Windows font file (for screen creation) | WFS0000.BIN - WFS4095.BIN | |

| Folder Name (fixed) | Contents | File Name | Transfer Direction |
|---|---|---|---|
| SCRN | Windows font file (messages) | WFM0000.BIN - WFM4095.BIN | V9 ← Storage |
| SNAP | Snapshot images of a network camera | VD00000.JPG - VD32767.JPG | V9 → Storage |
| SRAM | SRAM backup data | SRM0000.BIN | V9 ← Storage<br>V9 → Storage |
| WAV | WAV files for audio output | WA0000.WAV - WA9999.WAV (filename).WAV *3 | V9 ← Storage |

*1 When a file is stored in the backup folder, the year, month, day, hour, minute, and second (_yyyymmddhhmmss) are appended to the filename.
   Example: ALARM00_20140320150040.BIN
*2 Temporary file created during update
*3 Filename: Maximum of 64 one-byte uppercase alphanumeric characters, or 32 two-byte characters
*4 Year, month, day, hour, minute, and second (_yyyymmddhhmmss) are appended to the filename.
   Example: LIST0000_20140320150040.PDF
*5 Available with a BIN file only

Storage (SD card/USB flash drive)
└─ DSPDEF (Screen program auto-upload folder: Fixed folder name)

| Folder Name (fixed) | Contents | File Name | Transfer Direction |
|---|---|---|---|
| DSP | File for auto-uploading (When a storage device is inserted into the V9 series unit after DIP switch settings on the unit are finished, the screen program will automatically be uploaded into the storage device.) | DSPDEF.bin | V9 ← Storage |
| Others | Same as the access folder | | |

Storage (SD card / USB flash drive)
└─ OSUPDATE (Folder for updating the operating system: Fixed folder name)

| Folder Name (fixed) | Description | File Name | Transfer Direction |
|---|---|---|---|
| – | File for updating the operating system | fw.conf etc. | V9 ← Storage |

**2**

## 16-2.    Transferring a Screen Program

This section explains how to transfer data with an SD card inserted into the SD card slot on the V9 series unit.

1. SD card insertion
   Insert an SD card into the SD card slot on the back of the MONITOUCH.
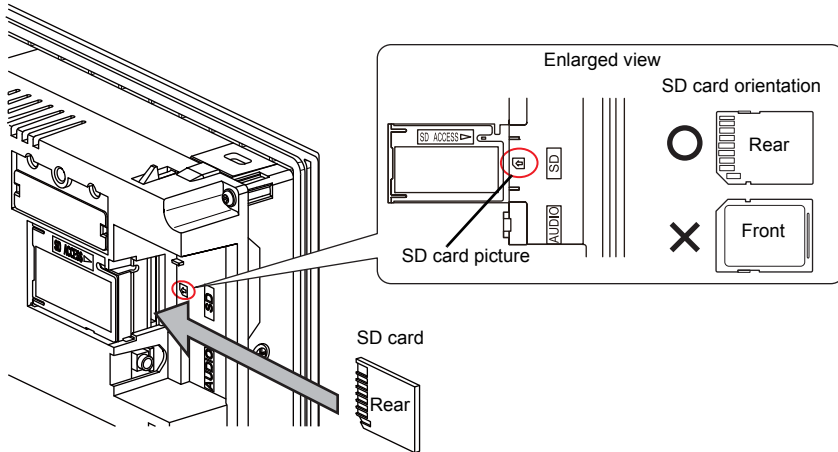


2. Storage Transfer screen display
   Switch to Local mode and press [Storage Transfer] in the menu icons.
   The Storage Transfer screen is displayed.

   *    Do not remove and reinsert the SD card from this point on.

3. Target storage device and data selection
   Select [[C:] SD Card] under [Storage to Connect] and [Screen Data] under [Data Selection].
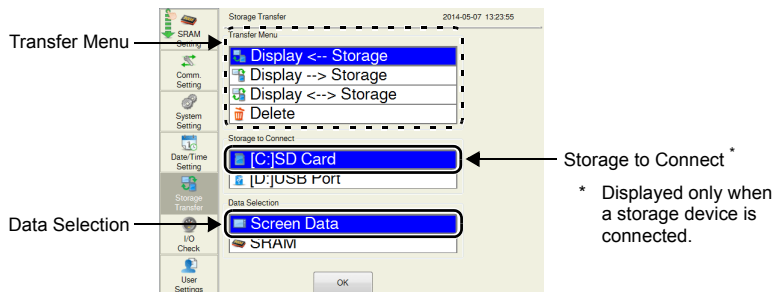


4. Transfer operation selection
   • Refer to "When [Display ← Storage] Is Selected:" (page 2-58).
   • Refer to "When [Display → Storage] Is Selected:" (page 2-60).
   • Refer to "When [Display ↔ Storage] Is Selected:" (page 2-61).

# When [Display ← Storage] Is Selected:

1. When [Display ← Storage] is selected, the following screen appears.

Information of the folder currently selected

Select data to transfer to MONITOUCH.

Free space in the SD card

Folder name currently selected *

Used for checking or changing folder names. To step 3.

Starts transfer from the storage device to MONITOUCH.

Returns to the previous screen.

*   \* The access folder name that is set in the screen program is displayed as default. If there is no screen program in the V9 series unit, "EXT0000" is displayed.
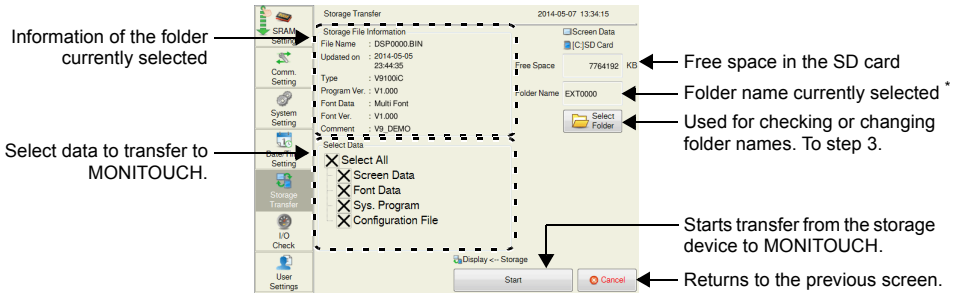
2. Access folder confirmation
   Check the storage information, free space on the storage device, and the folder name. When the selected folder is all right, proceed to step 4. To change the folder, proceed to step 3.

3. Access folder change (showing folders in the SD card)
   To change the access folder to another folder, press the [Select Folder] switch.
   The following screen appears. Select the desired folder and press the [OK] switch.

Shows the folders in the SD card.

After selecting a folder, press the [OK] switch to confirm the folder selection.
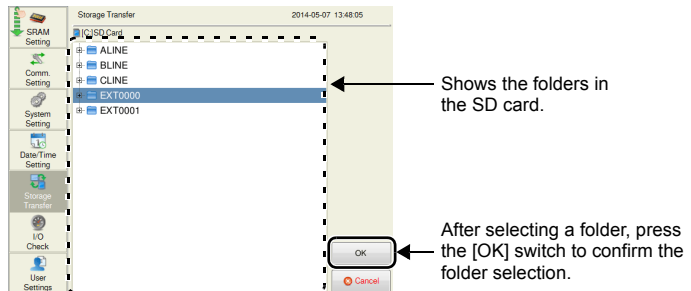
Pressing on the screen shows the contents of the folder.
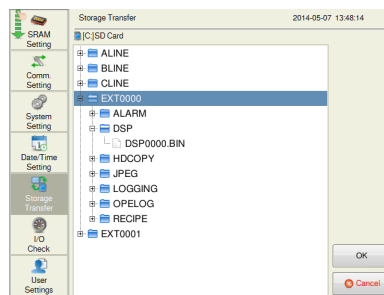
4.  Transfer data selection
    After selecting the folder under [Select Data], select the data to transfer.
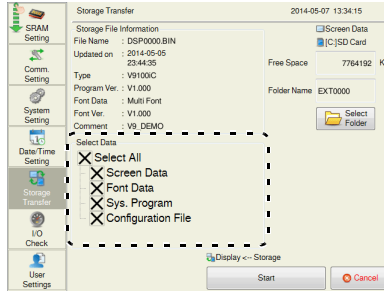


The following table shows the details of data to transfer.

| Data to Transfer | Description |
|---|---|
| Screen Data | Screen program file used on MONITOUCH |
| Font Data | System program file for MONITOUCH<br>Transfer when updating of the system program is required. |
| Sys. Program | Source file of fonts used for display on MONITOUCH |
| Configuration File | File in which settings changed on MONITOUCH are saved |

5.  Data transfer start
    Press the [Start] switch. The [Start] switch changes to [Transferring].
    The [Transferring data... (Storage)] dialog is displayed during transfer.
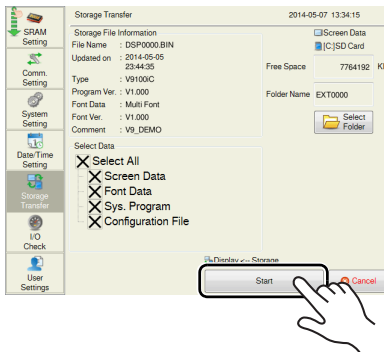
Data transfer start                          Transferring



6.  Data transfer completed
    When the data has been transferred successfully, the following message dialog is displayed. Press the [OK] switch.
    The System Information screen is automatically displayed on completion of data transfer.

Data transfer completed



*   If any other message is displayed, refer to "Message Dialog Displayed during Data Transfer (between V9 and Storage)" (page 2-65).

## When [Display → Storage] Is Selected:

1.  When [Display → Storage] is selected, the following screen appears.



Information of the folder currently selected

Free space in the SD card

Folder name currently selected

Starts transfer from MONITOUCH to the storage device.

Returns to the previous screen.

---

When the [Use Password When Transferring Screen to Storage from Display] checkbox is selected in the [System Setting] → [Other] → [Storage Setting] window, the following screen is displayed in advance of the screen shown in step 1. Enter a password and press the [OK] switch.



---

2.  Data transfer start
    Check the storage information and press the [Start] switch.

    *   If the access folders of the screen program and those in the SD card are named the same, data in the SD card will be overwritten.
        If the [Storage File Information] field is blank, a new file "DSP0000.BIN" will be created in the DSP folder under the access folder.
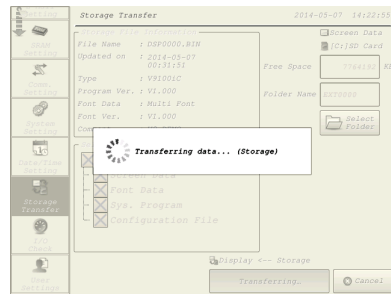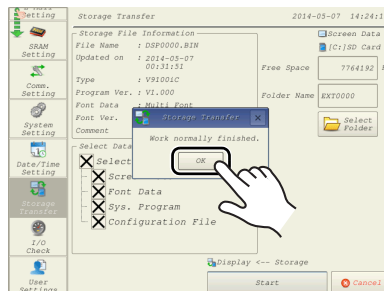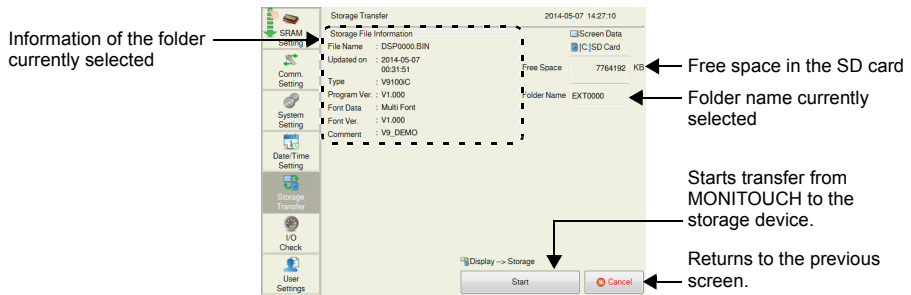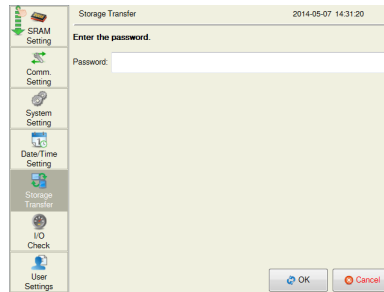
3.  During data transfer to data transfer completed
    During data transfer, the [Start] switch changes to [Transferring] and the [Transferring data... (Storage)] dialog is displayed.
    On successful completion, the following message dialog is displayed. Press the [OK] switch.

Transferring          Data transfer completed
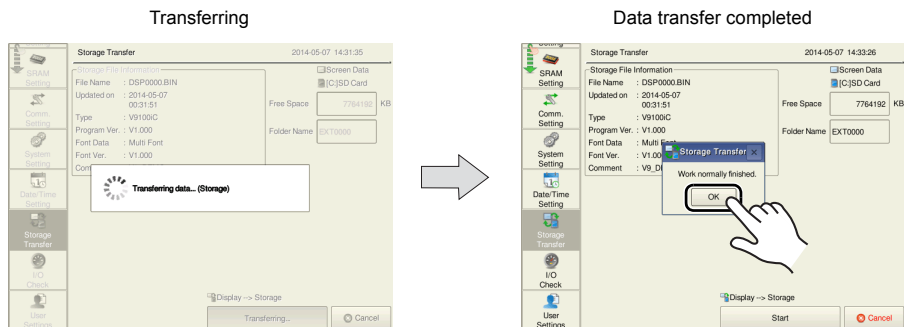


When the [OK] switch is pressed, the storage information switches to the information on the transferred data.

*   If any other message is displayed, refer to "Message Dialog Displayed during Data Transfer (between V9 and Storage)" (page 2-65).

**2**

## When [Display ↔ Storage] Is Selected:

1. When [Display ↔ Storage] is selected, the following screen appears.
   The screen program in MONITOUCH is compared with the screen program (in the DSP folder) in the access folder.

Information of the folder currently selected

Free space in the SD card

Folder name currently selected

Starts comparison between MONITOUCH and the storage device.

Returns to the previous screen.

2. Data comparison start
   Press the [Start] switch.

3. During data comparison to end of data comparison
   During data comparison, the [Start] switch changes to [Transferring] and the [Transferring data... (Storage)] dialog is displayed.
   On successful completion, the following message dialog is displayed. Press the [OK] switch.
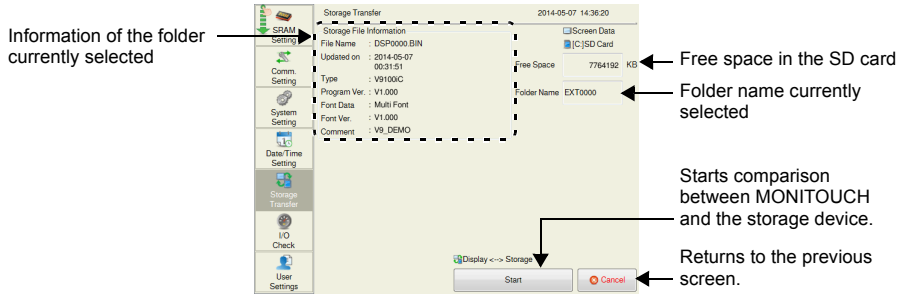
Comparing                                                    Data comparison completed

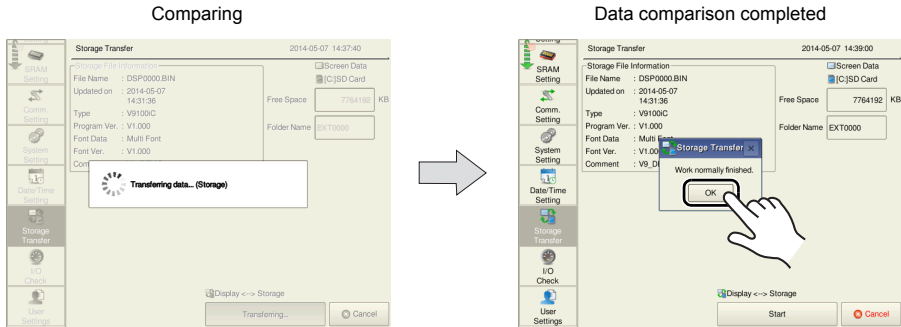\*   If any other message is displayed, refer to "Message Dialog Displayed during Data Transfer (between V9 and Storage)" (page 2-65).
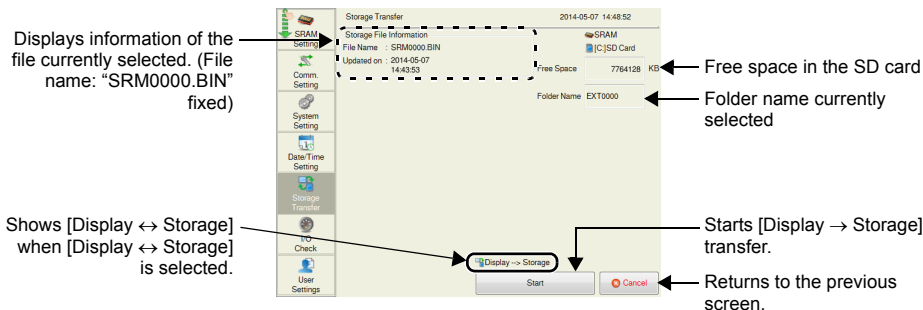
## 16-3. Saving Backup Copies of SRAM

This section explains how to save backup copies in an SD card inserted into the SD card slot on the V9 series unit.

1. SD card insertion
   Insert an SD card into the SD card slot on the back of the MONITOUCH.
   For details, refer to page 2-57.

2. Storage Transfer screen display
   Switch to Local mode and press [Storage Transfer] in the menu icons.
   The Storage Transfer screen is displayed.

   * Do not remove and reinsert the SD card from this point on.

3. Target storage device and data selection
   Select [[C:] SD Card] under [Storage to Connect] and [SRAM] under [Data Selection].

Transfer operation selection
Data selection
Target storage device selection *
   * Displayed only when a storage device is connected.
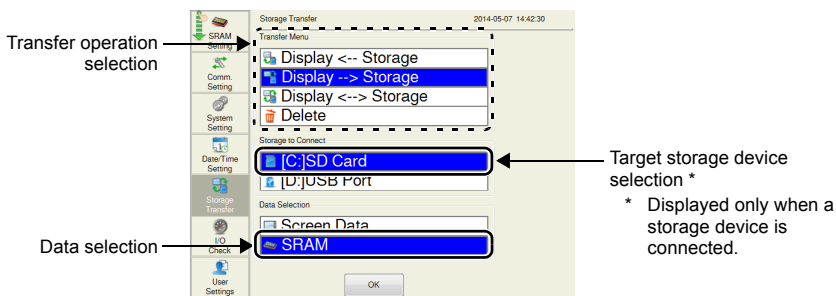
4. Transfer operation selection
   Select [Display ← Storage], [Display → Storage], or [Display ↔ Storage].

5. Access folder confirmation and selection
   The SRAM transfer screen is displayed.

   • When [Display → Storage] or [Display ↔ Storage] is selected:
   The access folder given the same name as the screen program in MONITOUCH is selected from the SD card. The selected folder name is displayed.

Displays information of the file currently selected. (File name: "SRM0000.BIN" fixed)
Free space in the SD card
Folder name currently selected
Shows [Display ↔ Storage] when [Display ↔ Storage] is selected.
Starts [Display → Storage] transfer.
Returns to the previous screen.

   • When [Display ← Storage] is selected:

Displays information of the file currently selected. (File name: "SRM0000.BIN" fixed)
Free space in the SD card
Folder name currently selected
Used to check or change the folder name.
For details, refer to page 2-58.
Starts [Display ← Storage] transfer.
Returns to the previous screen.

6. Data transfer or comparison start
   Check the storage information and press the [Start] switch.
   During data transfer or comparison, the [Start] switch changes to [Transferring] and the
   [Transferring data ... (Storage)] dialog is displayed.

Data transfer or comparison start

During data transfer or comparison
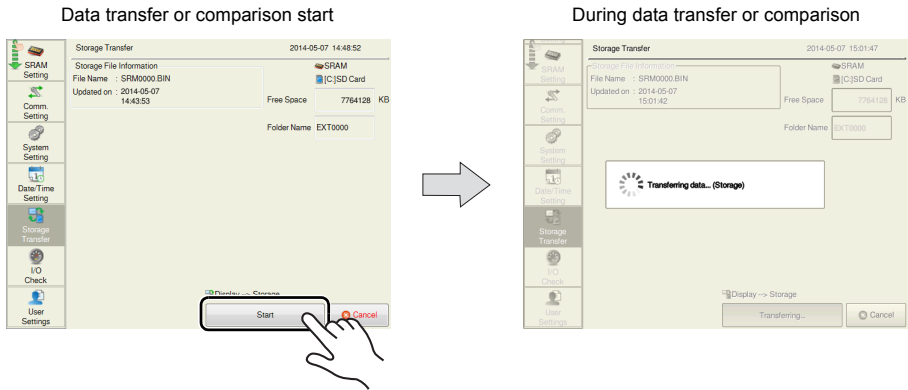


7. Data transfer completed
   On successful completion, the following message dialog is displayed. Press the [OK] switch.

Data transfer or comparison completed
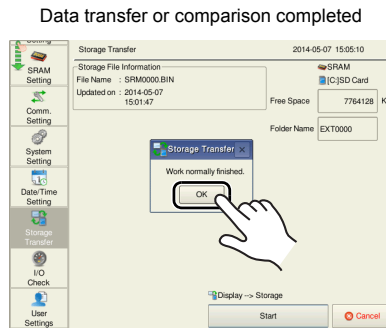


* If any other message is displayed, refer to "Message Dialog Displayed during Data Transfer (between V9 and Storage)" (page 2-65).

# 16-4. Deleting Data from Storage

This section explains how to delete data from an SD card inserted into the SD card slot on the V9 series unit.
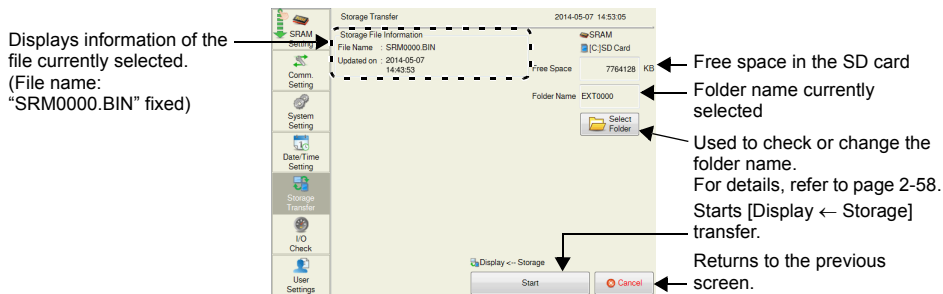
1. SD card insertion
   Insert an SD card into the SD card slot on the back of the MONITOUCH.
   For details, refer to page 2-57.

2. Storage Transfer screen display
   Switch to Local mode and press [Storage Transfer] in the menu icons.
   The Storage Transfer screen is displayed.

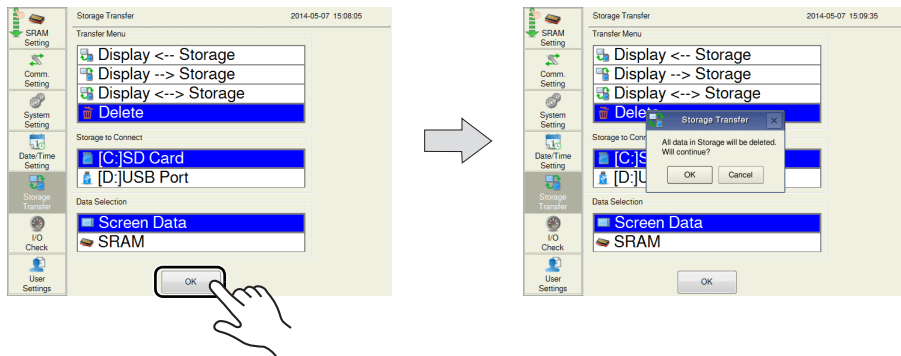   * Do not remove and reinsert the SD card from this point on.

3. Target storage device and data selection
   Select [[C:] SD Card] under [Storage to Connect].

4. Transfer operation selection
   Select [Delete] in the [Transfer Menu] and press the [OK] switch.
   The confirmation dialog shown below is displayed.



5. Execution of data delete to during execution
   Press the [OK] switch if deleting all data from storage.
   The switch is lit for a while.

Execution of data deletion                     During execution
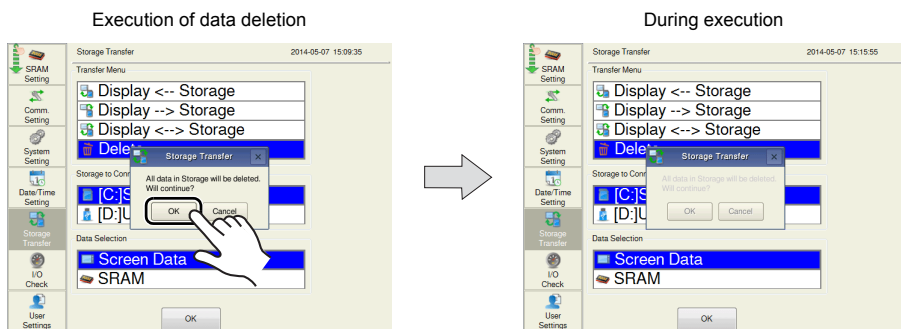


6. Data deletion completed
   When the data has been completely deleted, the message "Work normally finished." is displayed.

Data is completely deleted.

**2**

## 16-5. Message Dialog Displayed during Data Transfer (between V9 and Storage)

If an error occurs during data transfer, the message dialog shown on the right is displayed on the V9 series unit.

Messages and their contents are shown below.

| Messages | Description |
|---|---|
| Work normally finished. | The specified operation has been concluded normally. |
| Storage is not connected | Storage is not connected |
| Storage Capacity over | Cannot write data to a storage device because the data size in the V9 series unit is larger than the capacity of the storage device. |
| Write Protect: ON | Cannot write data to a storage device because the device is write-protected with the write-protect switch. |
| Writing Error occurred. | An error occurred during writing to a storage device. |
| Selected data does not exist. | The data does not exist in the reading target. |
| Data type is different. | When writing to the V9 series unit, the type of data in the storage device does not match the model of the V9 series unit. |
| Selected data cannot be read. | Data in the storage device cannot be read. |
| Reading Error occurred. | An error occurred during writing to the flash ROM in the V9 series unit. |
| Data discrepant | Data comparison found a discrepancy between the storage device and the V9 series unit. |
| Undefined Error occurred. | An error occurred due to a cause other than those mentioned above. |
| Invalid format. | The format of the file system in the storage device cannot be identified. Reformat it to FAT or FAT32 on the PC. |
| Cannot transfer this data to the connected model. | Data cannot be transferred because the type of data in the storage device does not match the hardware version of the V9 series unit. |

# 17.    I/O Check

Pressing [I/O Check] in the menu icons brings up the I/O Check screen.
This screen is used to check the touch switch and function switch operations as well as the connection status of the external devices (USB mouse, storage device, etc.) connected to the V9 series unit.
A network test can be performed by pinging a specified IP address from the V9 series unit. In addition, a test for finding any duplicate IP addresses on the network can be executed.

Menu icons                          I/O Check screen
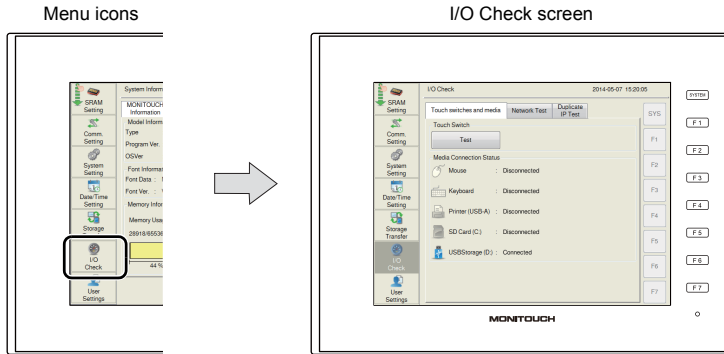


I/O Check screen
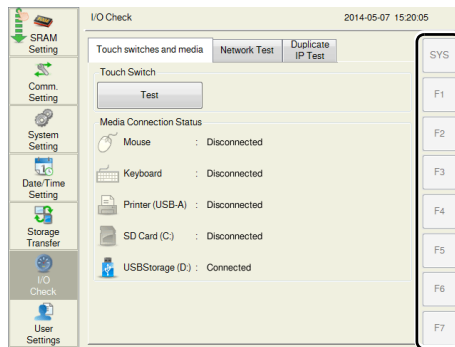


| Item | Description |
|------|-------------|
| [SYS] to [F7] lamps | Used for performing a switch test for the [SYSTEM] switch and the other function switches. (Refer to page 2-66) |

## [SYSTEM] Switch & Function Switch Test

Check operations of the eight switches provided vertically on the right side of the MONITOUCH panel. Hold down a switch, and check that the lamp on the right side of the screen lights up.

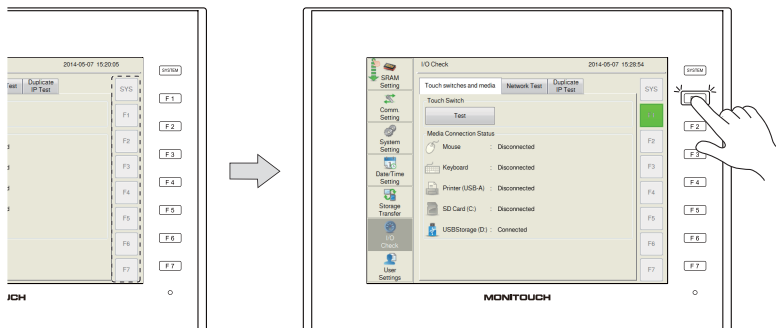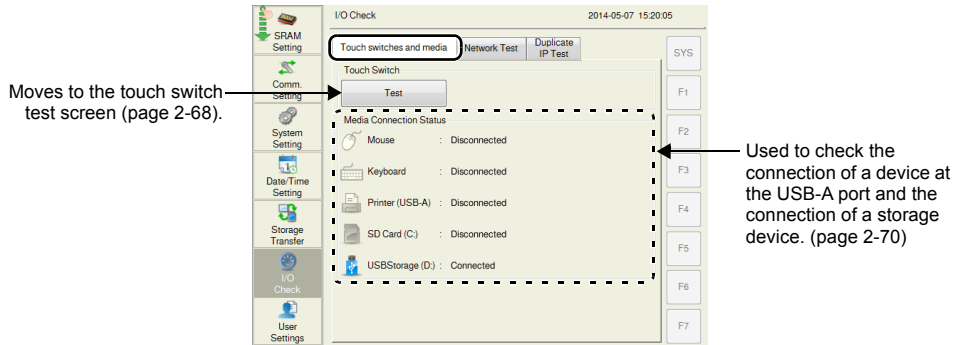## 17-1.    Touch Switch

The [Touch switches and media] tab window on the I/O Check screen allows you to check the touch switch operation as well as the connection status of an external device.

[Touch switches and media] tab window

Moves to the touch switch test screen (page 2-68).

Used to check the connection of a device at the USB-A port and the connection of a storage device. (page 2-70)

| | Item | Description |
|---|---|---|
| Touch Switch | Test | Executes a touch switch test. For details on the touch switch test, refer to page 2-68. For details on adjustment of the touch switch, refer to page 2-69. |
| Media Connection Status | Mouse | Checks the connection status of a USB mouse. |
| | Keyboard | Checks the connection status of a USB keyboard or USB barcode reader. |
| | Printer (USB-A) | Checks the connection status of a printer connected to the USB-A port. |
| | SD Card (C:) | Checks the connection status of an SD card. |
| | USB Storage (D:) | Checks the connection status of a USB storage device. |

## Touch Switch Test

If a touch switch does not activate at all, or if an operation is performed without pressing any touch switch, check if the touch switches on the V9 panel are working properly.

1. Press [I/O Check] in the menu icons and open the [Touch switches and media] tab window.

2. Press the [Test] switch. Grids appear on the screen as shown below.
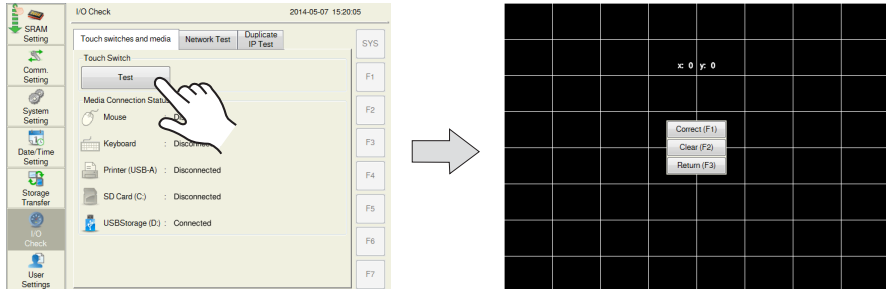


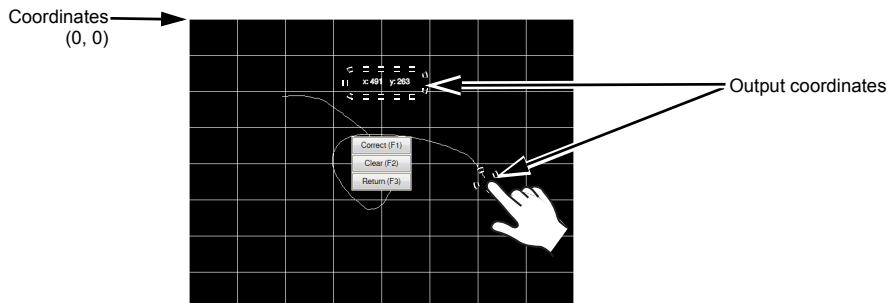3. Checking the switch output state:
Press a position on the screen, and check if the pressed position turns white. When the pressed position turns white, the switch is activated normally.



Coordinates (0, 0)

Output coordinates

When you move your finger off the screen, switches are displayed at the center as shown below.
To delete white marks, press the [Clear (F2)] switch on the screen or the [F2] function switch.
To return to the System Information screen, press the [Return (F3)] switch on the screen or the [F3] function switch.



Deletes white marks.

Returns to the System Information screen.
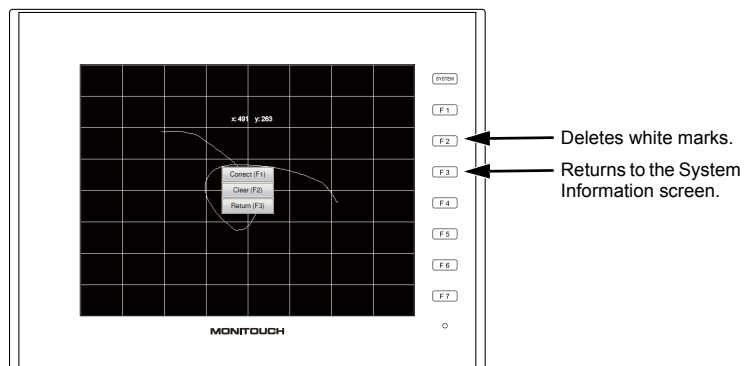
\* If a position different from the pressed position turns white, refer to "Touch Switch Adjustment" on the next page and adjust the touch switch position. (This adjustment is not possible for Advanced models.)

## Touch Switch Adjustment

If a position different from the pressed position turned white on the touch switch test described previously, follow the steps described below to adjust the touch switch position.
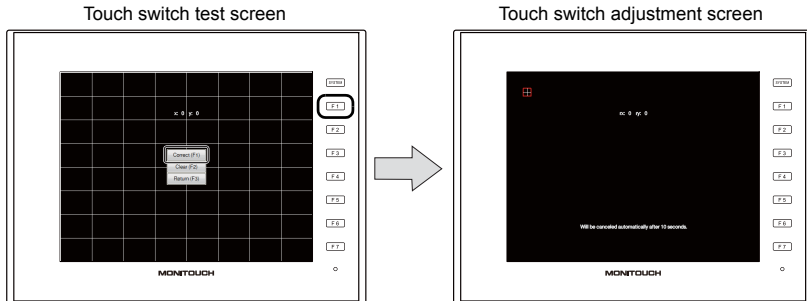
   * Touch switch adjustment is not available on Advanced models.

1. Press the [Correct (F1)] switch or the [F1] function switch on the touch switch test screen. The touch switch adjustment screen appears.

Touch switch test screen                          Touch switch adjustment screen



2. Press on the crosshairs at the top left corner.

   * If it is not pressed for longer than 10 seconds, the touch switch adjustment is automatically cancelled and the screen is returned to the touch switch test screen.

3. Press on the crosshairs at the bottom left corner.

   * If it is not pressed for longer than 10 seconds, the touch switch adjustment is automatically cancelled and the screen is returned to the touch switch test screen.

4. Press on the crosshairs at the bottom right corner.

   * If it is not pressed for longer than 10 seconds, the touch switch adjustment is automatically cancelled and the screen is returned to the touch switch test screen.

5. Press on the crosshairs at the top right corner.

   * If it is not pressed for longer than 10 seconds, the touch switch adjustment is automatically cancelled and the screen is returned to the touch switch test screen.

6. Press on the crosshairs at the center.

   * If it is not pressed for longer than 10 seconds, the touch switch adjustment is automatically cancelled and the screen is returned to the touch switch test screen.

7. Press the [Apply] to confirm the touch switch position. The touch switch test screen is displayed again.

   * To cancel the touch switch positions before confirming, do not press the [Apply] switch for 10 seconds. The touch switch adjustment is automatically cancelled and the touch switch test screen is displayed again.
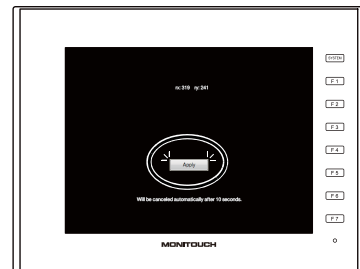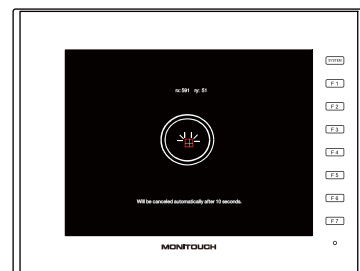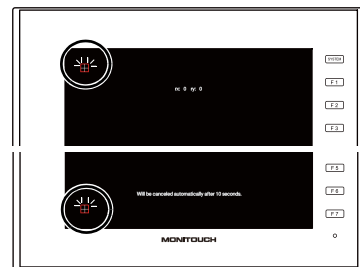
## USB-A/Storage Test

This section describes how to check the connection status of the storage device or other devices connected to the USB-A port.

### Checking the Connection Status

If [Disconnected] is displayed on the screen, the storage device or USB device is not connected or identified correctly. If [Connected] is displayed, it is identified.

Example: Checking the connection with a USB mouse

| Disconnected | | Connected |
|---|---|---|
| Mouse : Disconnected | ⟹ | Mouse : Connected |
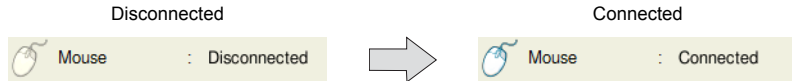
### Notes

The connection status of a keyboard or printer may not be checked in the following cases:
(They can be used without any problem even if [Disconnected] is displayed.)
- The keyboard or printer does not have information for identification.
- The OS does not have corresponding information for identification.

## 17-2. Network Test

The [Network test] tab window on the I/O Check screen allows you to execute a connection test from the V9 series unit to a specified IP address.

[Network Test] tab window
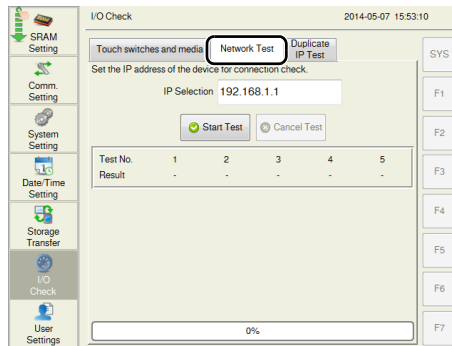


| Item | Description |
|---|---|
| IP Selection | Set an IP address for testing the connection from the V9 series unit. For details, refer to page 2-71. |

**2**

## Network Test

This section describes how to check the network status by checking the connection with a specified IP address from the V9 series unit.

1. Press [I/O Check] in the menu icons and open the [Network Test] tab window.

2. Press the section indicated in the following figure. The system keyboard appears. Enter the IP address of the counterpart device targeted for a connection test.
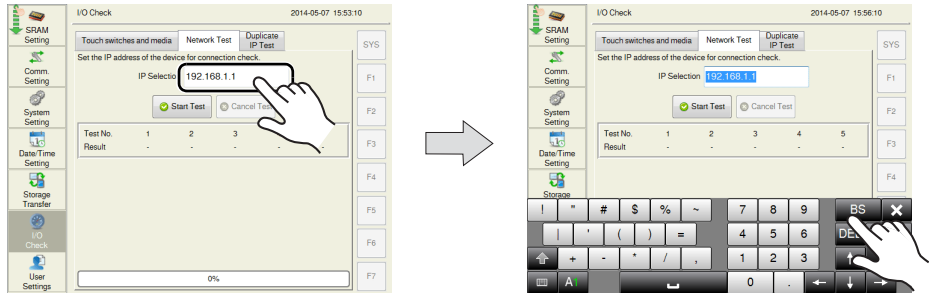


3. Press the [Start Test] switch. The test is repeated five times and the result is shown.



Result of the test

Progress of the test
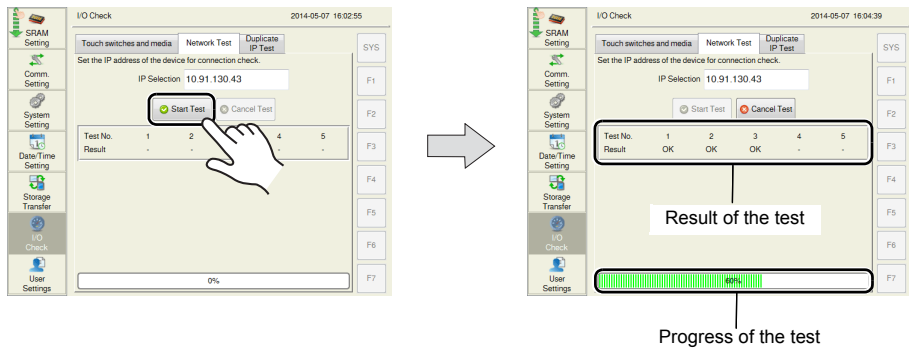
## 17-3. Duplicate IP Test

The [Duplicate IP Test] tab window on the I/O Check screen allows you to check if there are any duplicate IP addresses between the V9 series unit and the devices on the network.

[Duplicate IP Test] tab window
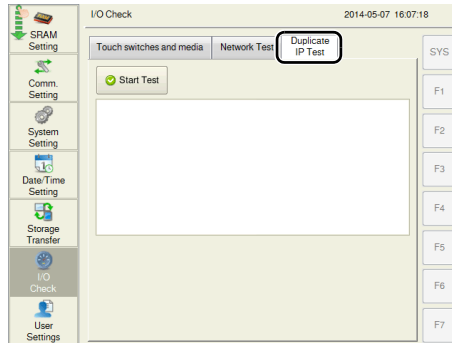


### Duplicate IP Test

1. Press [I/O Check] in the menu icons and open the [Duplicate IP Test] tab window.

2. Press the [Start Test] switch. The result is shown on the screen.
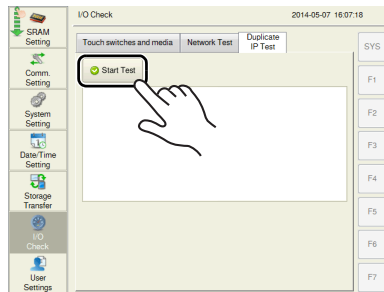


When there is no duplicate IP address:
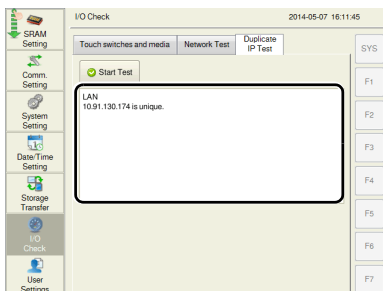


When a duplicate IP address is found:
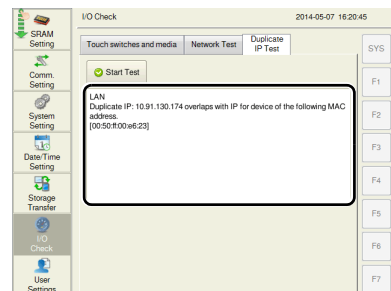


The MAC address of the device having a duplicate IP address is displayed.

## 17-4.   RGB Adjustment

The [RGB Adjustment] tab window on the I/O Check screen allows you to perform adjustments for the RGB input screen.

   * The [RGB Adjustment] tab is displayed only when the optional "GUR-01", "GUR-10", or "GUR-11" unit is installed.

For details on RGB adjustment, refer to the V9 Series Reference Manual 2.

**2**

Local Mode Screen

# 18.    User Settings

Pressing [User Settings] in the menu icons brings up the User Settings screen. This screen is used to register and view users who can use password-protected functions. User accounts can be added, deleted, and edited on this screen.

The following functions require user settings.

- Security function
- VNC server
- FTP server

| Menu icons | | User Settings screen |
|---|---|---|
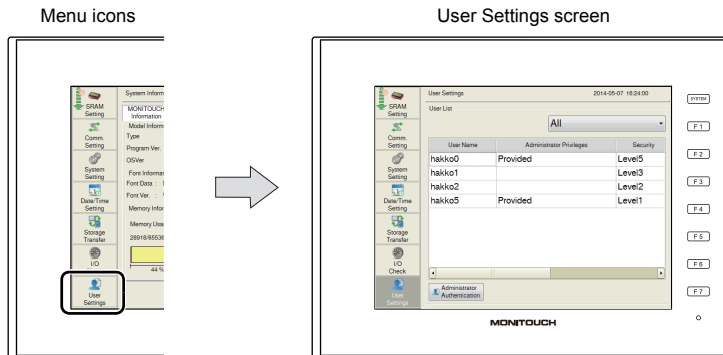
User Settings screen

| When there is no user account registered: | When there is any user account registered: |
|---|---|

| Item | Description |
|---|---|
| User List | Displays the users with user settings configured (with a user name and password registered). User names registered with V-SFT version 6 are displayed. |
| View all / Show only security / Only the VNC server display / Show only FTP server | Select a criterion to display specific users in the user list.<br>• View all:    All user names are listed.<br>• Show only security:    Only users who are granted security privileges (with a security level set) are listed.<br>• Only the VNC server display:    Only users who are allowed to access the VNC server are listed.<br>• Show only the FTP server:    Only users who are allowed to access the FTP server are listed. |
| Add | Adds a new user account. For details, refer to page 2-76. |
| Administrator Authentication | Displays the administrator authentication screen. Authentication of administrator privileges is required before adding a new user account or deleting/editing a registered user account, if any. For details, refer to page 2-75. |
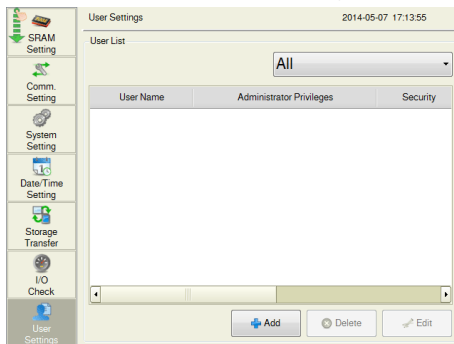
## Administrator Authentication

Authentication of administrator privileges is required before adding a new user account or deleting/editing a registered user account, if any.

⚠️  Without administrator privileges, no account can be added, deleted, nor edited.



Addition, deletion and editing of a user account possible

Addition, deletion and editing of a user account impossible

1.  Press [User Settings] in the menu icons and press the [Administrator Authentication] switch.
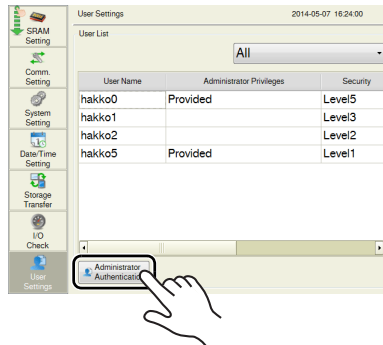


2.  The screen for administrator authentication is displayed. Enter an administrator name and password, and press the [OK] switch. "Administrator Mode" is displayed on the screen.
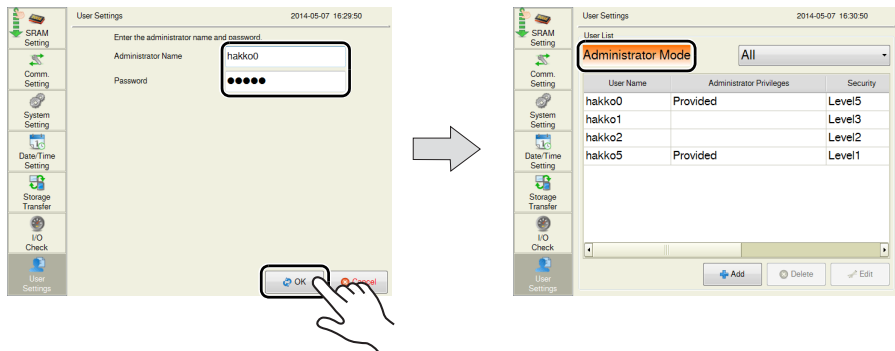


\*  If the User Settings screen is switched to other screens after authentication, administrator authentication is automatically cancelled.

### Adding a User Account

This section explains how to add a new user account in the administrator mode.
A maximum of 32 user accounts can be registered on the V9 series unit.

1.  Press the [Add] switch.
    Enter a user name and password to add.
    A maximum of 16 one-byte alphanumeric characters (case sensitive) can be used for a user name
    or password.

    *   **When permitting access to a certain security level, set a user name and password
        within eight one-byte alphanumeric characters.**
    *   **The user name must be unique.**
    *   **The same password can be set for multiple users.**

    To grant administrator privileges, select the [Grant administrator privileges.] checkbox.

    *   For details on administrator privileges, refer to "Administrator privileges" (page 1-11).
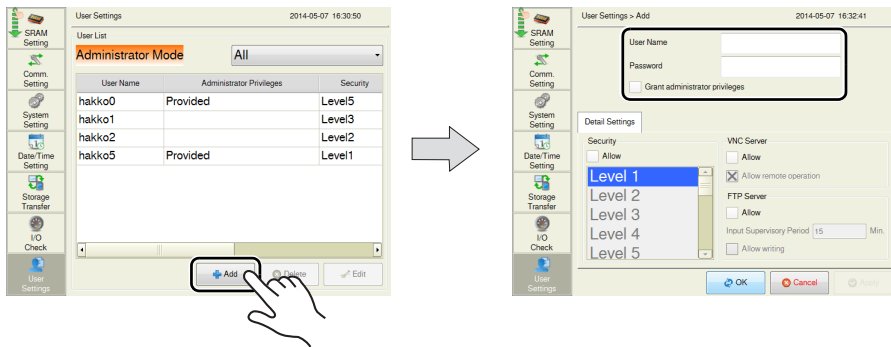


2.  In the [Detail Settings] tab window, select whether or not to allow the user to access a certain
    security level, VNC server, or FTP server.

    *   For details on each function, refer to the V9 Series Reference Manual 2.
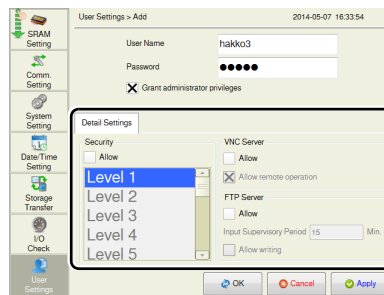


3.  Press the [Apply] or [OK] switch. The set user account is added to the list.
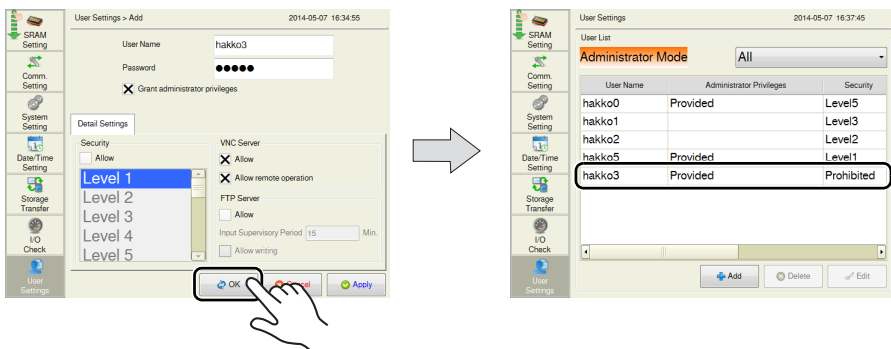
### Deleting a User Account

This section explains how to delete a registered user account in the administrator mode.

1.  Select a user account to delete from the user list and press the [Delete] switch.



<table>
<tr><td rowspan="2"><img alt="warning"/></td><td>• User accounts that can be deleted</td></tr>
<tr><td>
- The account of an administrator user that is currently logged in<br>
- User accounts which were registered on MONITOUCH ([Registered in: Main unit]) and are not granted administrator privileges
</td></tr>
</table>
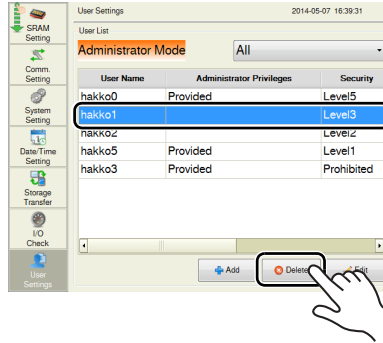
   • User accounts that can be deleted
   - The account of an administrator user that is currently logged in
   - User accounts which were registered on MONITOUCH ([Registered in: Main unit]) and are not granted administrator privileges

   • User accounts that cannot be deleted
   - The account of users granted administrator privileges (other than the administrator user that is currently logged in)
   - User accounts which were registered in the screen program ([Registered in: Screen Data])

   Example: When administrator "hakko5" is logged in:



Deletion impossible
Deletion possible
Deletion impossible

2.  The confirmation dialog shown below is displayed. To delete, press the [OK] switch.
    The selected user account is deleted from the list.
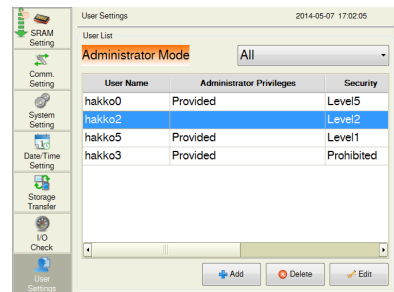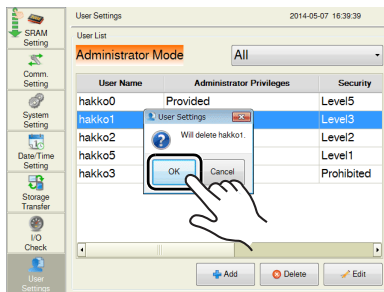
**Editing a User Account**

This section explains how to edit a registered user account in the administrator mode.

1. Select a user account to edit from the user list and press the [Edit] switch.
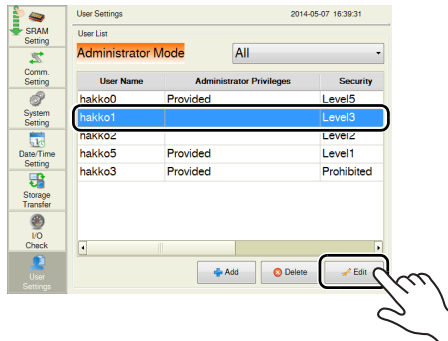




- User accounts that can be edited
  - The account of an administrator user that is currently logged in
  - User accounts which were registered on MONITOUCH ([Registered in: Main unit]) and are not granted administrator privileges

- User accounts that cannot be edited
  - The account of users granted administrator privileges (other than the administrator user that is currently logged in)
  - User accounts which were registered in the screen program ([Registered in: Screen Data])

The user account which has been registered on MONITOUCH with no administrator privileges granted can be edited.
User accounts registered in the screen program and other administrators cannot be edited.

Example: When administrator "hakko5" is logged in:



2. After changing the settings, press the [Apply] or [OK] switch. The settings are updated.

# 19.    Standards (Only for Wireless LAN I/F Models)

Pressing [Standards] in the menu icons brings up the Standards screen.
This screen is for viewing certification information of wireless LAN for the V9 series.

Menu icons                              Standards screen
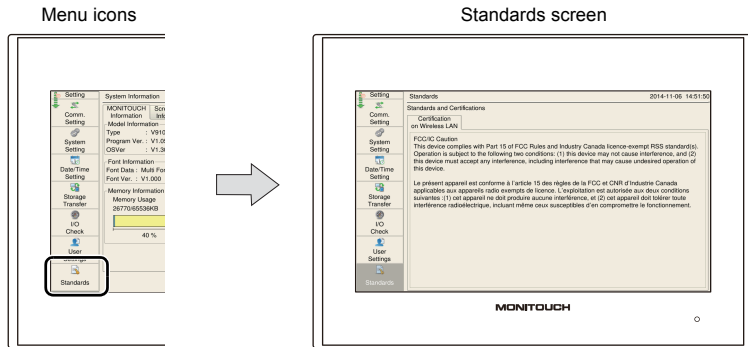


## Standards and Certifications

### Certification on Wireless LAN

FCC / IC Caution
This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS
standard(s). Operation is subject to the following two conditions: (1) this device may not cause
interference, and (2) this device must accept any interference, including interference that may cause
undesired operation of this device.

Le présent appareil est conforme à l'article 15 des règles de la FCC et CNR d'Industrie Canada
applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions
suivantes: (1) cet appareil ne doit produire aucune interférence, et (2) cet appareil doit tolérer toute
interférence radioélectrique, incluant même ceux susceptibles d'en compromettre le fonctionnement.

# 20.    OS Update

Pressing [OS Update] in the menu icons brings up the OS Update screen.
This screen is used when manually updating the operating system (OS) for operating the V9 series
unit.

* The [OS Update] menu icon is displayed only when a storage device (SD card or USB flash drive)
  containing the file for updating the operating system is connected.

Menu icons                                              OS Update screen
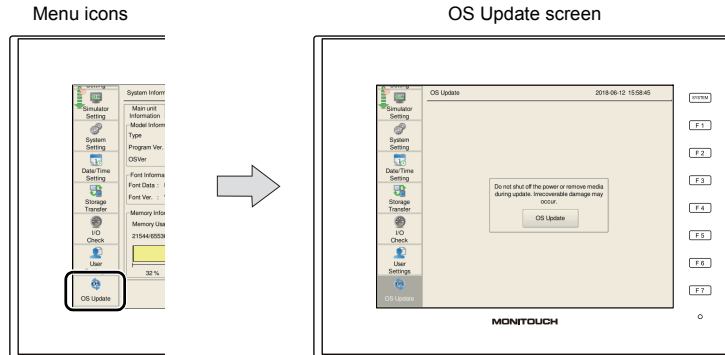


For details on updating the operating system, refer to the V9 Series Reference Manual 2.

# 3.      Handling Data Changed in Local Mode

The following items set in the screen program can be changed on the V9 series unit.

| Item | Setting in Local Mode [1] | Setting in V-SFT Version 6 |
|---|---|---|
| V9 series IP address | [LAN Setting] (page 2-12) [LAN 2 Setting] (page 2-12) | [System Setting] → [Ethernet Communication] → [Local Port Address] |
| E-mail settings | [E-Mail Setting] (page 2-33) | [System Setting] → [Ethernet Communication] → [E-Mail] |
| Communication parameters | [Comm. Setting] (page 2-39) | [System Setting] → [Hardware Setting] |
| Buzzer, backlight | [System Setting] (page 2-49) | [System Setting] → [Unit Setting] → [Buzzer] / [Backlight] |
| User settings | [User Settings] [2] (page 2-74) | • Security [System Setting] → [Other] → [Security Setting] • FTP server [System Setting] → [Ethernet Communication] → [FTP server] |

[1]    Changes in Local mode can be prohibited. For details, refer to page 2-83.
[2]    Only the security settings can be changed from the system menu. For details, refer to "Security" (page 1-8).

## Settings Changed in Local Mode

- The screen program will not be overwritten.

- The settings changed in Local mode are retained even if the power to the V9 series unit is turned off.

- If a setting is changed in Local mode, the Local mode setting takes priority.
  To restore the settings of the screen program, press the [Restore Screen Data Settings] switch on the respective Local mode screen.

- When writing the screen program into the V9 series unit using V-SFT version 6, you can select whether to retain the setting (INI file) changed on the unit or clear it.

  **<How to clear the INI file using V-SFT version 6>**

  1) Cable connection
     Connect the V9 series unit to a computer using a transfer cable ("V-CP", USB cable, or Ethernet cable).

  2) Starting V-SFT Version 6
     Start V-SFT version 6 on the computer.

  3) Displaying the [Transfer] dialog
     Click [Transfer] → [Download]. The [Transfer] dialog is displayed.

  4) Selecting data to be transferred
     Select [Screen Data] for [Transfer Data].
     Check the [Clear IniFile] in the [Option] window and click [OK].
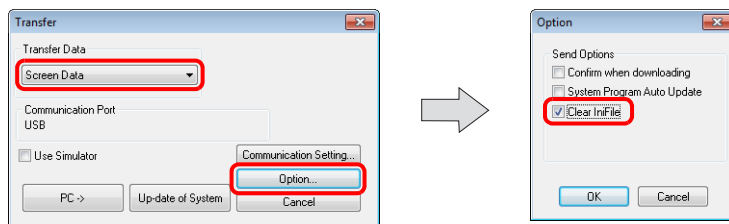
5) Start downloading to MONITOUCH
Click [PC →]. Screen program transfer starts.
When the following dialog is displayed, click [Yes].

> V-SFT Version 6.0
>
> Inifile will be deleted.Continue?
>
> Yes   No
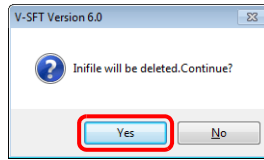
* The language setting (page 2-10) of the V9 series unit will be set to English if the INI file is deleted.
Change the language setting from "Language Setting" (page 2-10) in Local mode as required.

• The screen program read from the V9 series unit using V-SFT version 6 does not include settings changed on the unit.
(The screen program that was transferred to the unit is read in its original state.)
To read the settings changed on the unit, an INI file must also be read.

**<How to read the INI file using V-SFT version 6>**

1) Cable connection
Connect the V9 series unit to a computer using a transfer cable ("V-CP", USB cable, or Ethernet cable).

2) Starting V-SFT Version 6
Start V-SFT version 6 on the computer.

3) Displaying the [Transfer] dialog
Click [Transfer] → [Upload]. The [Transfer] dialog is displayed.

4) Selecting data to be transferred
Select [Ini File] for [Transfer Data].

5) Start of reading
Click [PC ←]. Reading of the INI file starts.

6) Saving of INI file
When the INI file has been transferred, the [Save As] dialog is displayed on the computer. Save the file under a new name. The file extension is "*.BIN".

* The INI file cannot be edited nor can it overwrite the screen program file.

* To transfer the saved INI file to the V9 series unit, click [Transfer] → [Download] in step 3) and click [PC →] in step 5).

**<How to save the INI file in the storage device>**
Refer to "When [Display → Storage] Is Selected:" (page 2-60) and save the INI file in the storage device.

• When data transfer is executed by selecting [Display → Storage] on the Storage Transfer screen (refer to "Storage Transfer" (page 2-54)), settings changed on MONITOUCH are written into the storage device.
When executed by selecting [Display ← Storage], settings changed on MONITOUCH are written by selecting [Configuration File] in [Select Data].

## Prohibition of Setting Change in Local Mode

Some settings that can be configured in Local mode can be prohibited from being changed on the V9 series unit.

### Setting in V-SFT Version 6

Select [System Setting] → [Unit Setting] → [Local Mode] → [Local Mode Prohibition Setting], and select the [Prohibit Setting] checkbox.
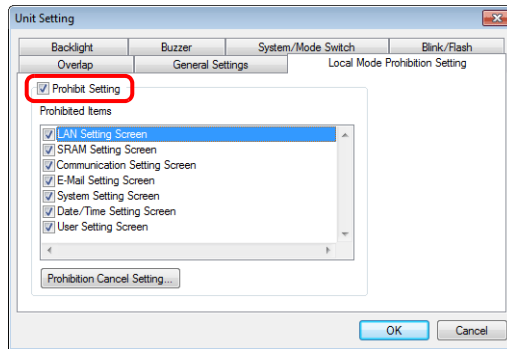


When the [Prohibit Setting] checkbox is selected, you can select items to be prohibited from being changed in Local mode.

   \*  When the [LAN Setting Screen] checkbox is selected, both the LAN Setting screen and LAN2 Setting screen will be prohibited.

To enable cancellation of all prohibition settings at once on the V9 series unit, register a password for cancellation.

Click [Prohibition Cancel Setting] and select the [Request a password to cancel the prohibition] checkbox, and register a password (maximum of 16 one-byte alphanumeric characters).

   \*  If no password is registered, the prohibition setting cannot be cancelled on the V9 series unit even if the [Request a password to cancel the prohibition] checkbox is selected.
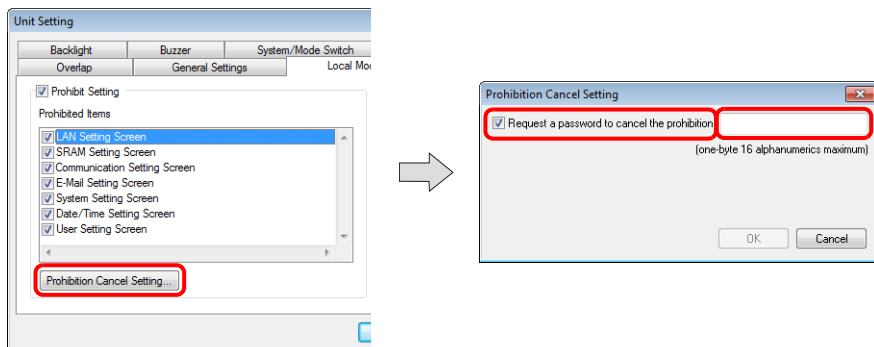
### V9 Series Local Mode

When the Local-mode prohibition setting has been made in V-SFT version 6, the menu icon displayed in Local mode on the V9 series unit is changed as follows:

Example: [LAN Setting] menu icon

Without prohibition setting          With prohibition setting



"⊘" is shown at the bottom right on the menu icon of the prohibited item.

[IP Setting] tab window on the LAN Setting screen
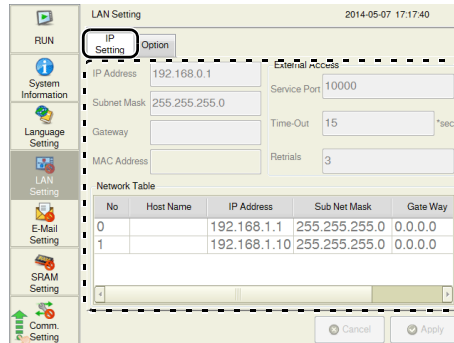


← Grayed out and no setting can be changed.

If a password has been registered in the [Prohibition Cancel Setting] window in V-SFT version 6, the list of password-protected settings is displayed in the [Screen Data Information] tab window of the System Information screen in Local mode.
To cancel all prohibition settings at once, follow the procedure described below.

1.  Press [System Information] in the menu icons and open the [Screen Data Information] tab window on the System Information screen.
    Press anywhere on the area enclosed in the following figure. Then the system keyboard appears. Enter the password.
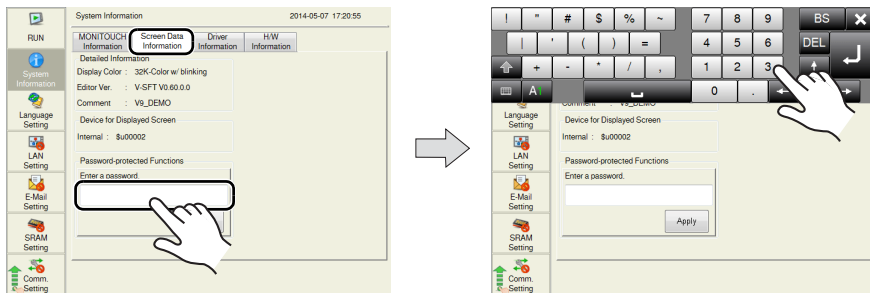
2. Press the [Apply] switch. The following confirmation dialog appears. Press the [OK] switch.
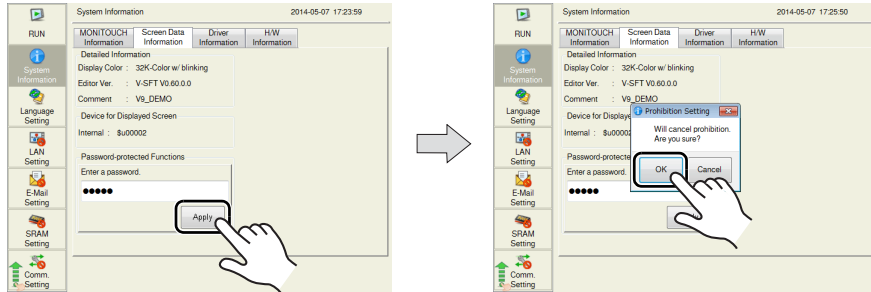


3. All items that were prohibited in Local mode become unprotected.
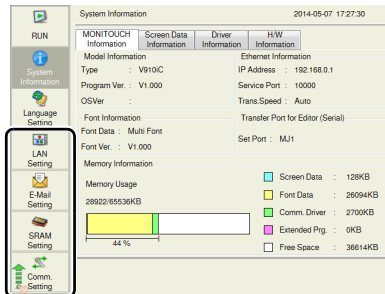


4. To validate the Local-mode prohibition setting again, open the [System Information] → [Screen Data Information] tab window, and press the [Relock] switch.
   The following confirmation dialog appears. Press [OK].

   * The prohibition setting is also validated again after the power is turned off and back on again or a screen program with Local-mode prohibition settings is transferred.
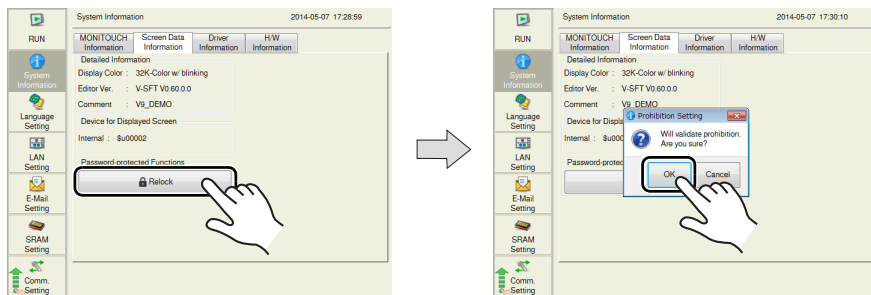


**Notes**

- When a screen program is transferred without selecting the [Prohibit Setting] checkbox in the [System Setting] → [Unit Setting] → [Local Mode] → [Local Mode Prohibition Setting] tab window in V-SFT version 6, the Local-mode prohibition setting becomes invalid (cancelled).

# MEMO

Please use this page freely.

# 3 Error Handling

1. Error Messages
2. Troubleshooting

# 1.    Error Messages

There are three kinds of error messages displayed on the V9 series:

1.   Setup error

2.   Screen program error

3.   Communication error

## 1.    Setup Error

When no screen program is present or no system program has been transferred, the following message is displayed on the V9 series unit. Solve the error according to the error message.
When the [Retry] switch is pressed, the operation mode switches to RUN mode.
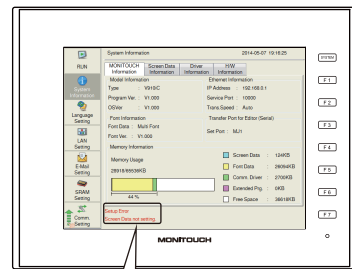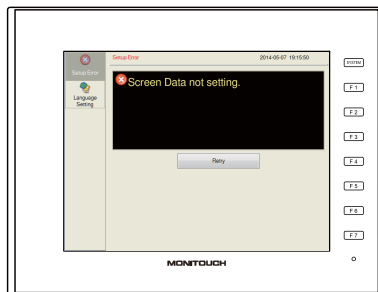


Setup Error
Screen Data not setting.

\*   The error is also displayed in Local mode.

## 2.    Screen Program Error

When an error is found in the screen program, the following message is displayed on the V9 series unit.
For details on error numbers, refer to page 3-12.
When the [Retry] switch is pressed, the operation mode switches to RUN mode.
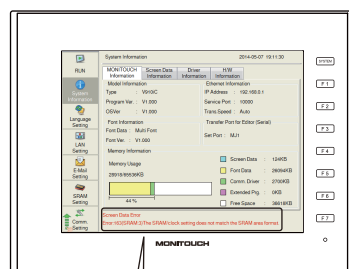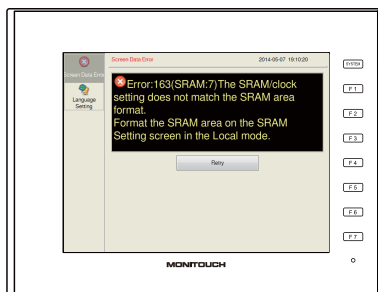


Screen Data Error
Error:163(SRAM:3)The SRAM/clock setting does not match the SRAM area format.

\*   The error is also displayed on the Local mode screen.

## 2-1. Error Numbers

Check the contents of the error (= error number) according to the item name and sub-item number, and remove the error.

Error : XX (XX : XXX) ── Sub-item number (Refer to page 3-8.)
└──── Item name (Refer to page 3-8.)
└──── Error number

\* **Error numbers with "\*" do not occur under ordinary circumstances.**
**If any of these errors are displayed, contact your local distributor (specified on the back cover).**

| Error No. | Contents | Solution |
|---|---|---|
| 3 | Data version does not match the MONITOUCH system program version. | Transfer the MONITOUCH system program from the V-SFT editor. If the problem persists, check the editor version and the system program version of the V9 series, and contact your local distributor. |
| 10 | The communication I/F unit is not installed, or it does not match the I/F driver. | Install the communication I/F unit. Transfer the I/F driver again. |
| 11 | The PLC model set in the screen program does not match the I/F driver. | Check the PLC model and transfer the I/F driver again. |
| 12 | The I/F driver version does not match the screen program version. | Check the editor version and the I/F driver version, and contact your local distributor. |
| 13 | The I/F driver version does not match the version of the MONITOUCH system program. | Check the I/F driver version and the system program version of the V9 series, and contact your local distributor. |
| 15 | The interface language on MONITOUCH does not match the language set in the screen program. | Check the MONITOUCH model and the language set in the created program. |
| 17 | The network I/O number exceeds the usable number range. | Set a number within the usable range. |
| 19 | An I/F driver that is unsupported on MONITOUCH is transferred. | Transfer the correct I/F driver. |
| 20 | The maximum capacity of the logging server has been exceeded. | The capacity of DRAM specified under [Internal Storage Setting] in the [Logging Server] window has exceeded the maximum available capacity. Reduce the number set for [Number of Data to Save]. |
| 22 | The logging/alarm block number specified for a trend or alarm part has not been set. | Select [System Setting] → [Logging Server] or [Alarm Server], and set the corresponding block number again. |
| 23\* | Memory card file number error | Contact your local distributor. |
| 25 | Too many logging entries in the logging server, or too many alarms monitored by the alarm server | Check the number set for [Number of Logging] in the [Logging Server] window or [Number of Monitoring Alarms] in the [Alarm Server] window. [Number of Logging]:   Max. 256 words [Number of Monitoring Alarms]:                 Max. 1024 words |
| 27\* | An error was found in the logging server or alarm server. | Contact your local distributor. |
| 28 | The same function is set for both MJ1 and MJ2 ports. | Check the settings in the [Hardware Setting] window and specify correctly. |

| Error No. | Contents | Solution |
|---|---|---|
| 29 | The memory capacity is insufficient. | Reduce the number set for [Number of Data to Save] under [Internal Storage Setting] or [Number of Monitoring Alarms] in the [Alarm Server] window.<br>Delete the following settings if not necessary.<br>• Multi-link/Multi-link2<br>• Ladder monitor<br>• Connected devices not in use<br>If the problem persists, contact your local distributor. |
| 30 | The number of registered items is too many. | Reduce the number of items. |
| 31 | The memory capacity for the registered items is insufficient. | Take the following action for the relevant screen.<br>Reduce the number set for [Number of Monitoring Alarms] in the [Alarm server] window.<br>Reduce the number of items placed on the screen. |
| 32 | The number of items that uses the memory exceeds the available number. | Reduce the number of items. |
| 33 | The maximum number of switches and lamps that can be set has been exceeded. | The number of switches and lamps placed on the screen has exceeded 4096. Switches and lamps on overlap displays are included in this number.<br>Reduce the number of switches and lamps. |
| 34 | The items that occupy the memory area exceed the available work memory capacity. | Reduce the amount of data. |
| 35* | Variable length data error | Contact your local distributor. |
| 36* | ITEM error | |
| 37* | Component ITEM error | |
| 38* | Component error | |
| 40* | Group byte count error | |
| 41* | Recognition flag error | |
| 42* | Function ITEM error | |
| 43* | Function ITEM end error | |
| 44* | Group ITEM end error | |
| 46 | An unavailable device memory address is set or the available device memory range is exceeded. | Check the device memory setting.<br>For a system with an Ethernet connection, check the settings at [Hardware Setting] → [Target Settings] → [PLC Table]. |
| 47 | IDs of the items having setting limitations in the screen library are duplicated on a screen. | Check the IDs and keep them unique. |
| 49* | Group ITEM error | Contact your local distributor. |
| 50* | Link ITEM error | |
| 51* | Editor ITEM error | |
| 52 | The overlap ID is incorrect and must be a value from "0" to "9". | Check the overlap ID and set correctly. |
| 53 | An overlap library number with no part registered is specified in the call-overlap setting. | Specify an overlap library number with a part registered. |
| 55* | Multi-overlap header error | Contact your local distributor. |
| 56* | Graphic undefined command error | |
| 57* | Graphic ITEM error | |
| 58* | Graphic execution error | |
| 59* | Switch function error | |

**3**

Error Handling

| Error No. | Contents | Solution |
|---|---|---|
| 60 | Switch operating area error | Reset the switch operating area. |
| 61* | Statistic graph % display No. exceeding | Contact your local distributor. |
| 62* | Multi data exceeding | |
| 63 | The ordinal number for data block selection (a maximum of four) is duplicated. | Check the ordinal number for data block selection, and set correctly. |
| 64* | Data display element No. error | Contact your local distributor. |
| 65 | The scale or graph is not set correctly in the trend part settings. | Correct the settings for [Scale Max. Value] and [Scale Min. Value] or [Graph Max. Value] and [Graph Min. Value] in the [Detail] window. |
| 66* | Internal circle radius is "0". | Contact your local distributor. |
| 67* | The number of points to display is equal to or smaller than zero. | |
| 68 | The display area is insufficient for the area (lines) that is displayed by one bit (bit order alarming). | Check the value specified for [Message Lines] in the [Alarm Server] window, and enlarge the display area. |
| 69 | A pattern or frame larger than the screen size has been specified. | Re-set the pattern or frame. |
| 70 | Too many columns or lines on the data sheet | Check the data sheet columns/lines, and set correctly. |
| 72 | The setting for real time printing of the alarm part has exceeded the upper limit, or the specified alarm block number is not unique. | There are four or more alarm parts with [Use the real-time printing function] selected. Or, there are two or more alarm parts for which the same [Alarm Block No.] is set with [Use the real-time printing function] selected. Select the [Use the real-time printing function] setting within the limitations. If the problem persists, check the editor version and the system program version of the V9 series, and contact your local distributor. |
| 73 | There are four or more video parts on one screen. (Including the screen library) | Check the number of video parts and reduce the number. |
| 74 | An animation part is placed in the area other than the base screen (screen library, etc.). | Place the animation part on the base screen. |
| 75 | The model selected in the screen program is not consistent. | Transfer the system program of the V9 series from the editor. |
| 77* | Expanded graphic ITEM error | Contact your local distributor. |
| 78* | Expanded function ITEM error | |
| 79 | Component parts occupy too much memory capacity. | Reduce the number of component parts. |
| 80* | Macro: Undefined command error | Contact your local distributor. |
| 81 | Macro: The numbers of FOR and NEXT commands are not the same. FOR-NEXT commands are nested beyond 8 levels. | Correct the FOR-NEXT commands. |
| 82 | Macro: There are two different commands for the same label number. | Macro: Re-set the label. |
| 83 | Macro: There is no destination label for the jump. | Macro: Change or set the destination label. |
| 84* | Macro: Incorrect use of device memory | Change the macro command. |
| 85* | Macro: Undefined system call | Contact your local distributor. |
| 90 | Unregistered screen library is used. | Check the screen library number. |
| 91 | Bitmap data for a switch or lamp is not registered. | Check the following points: No bitmap name is designated. The part size is too large. There is no bitmap file in the [Parts] folder located under [MONITOUCH] → [User]. |

| Error No. | Contents | Solution |
|---|---|---|
| 92* | Multi-language initial display string No. error | Contact your local distributor. |
| 94 | Multi-language selection string number error | |
| 95 | MR400 format table setting: String code error | There is an invalid code after "\" in the string. |
| 96 | MR400 format table setting: String size error | The total size of the string is too large. |
| 97 | Multi-language font setting error | Transfer the first language font or screen program again. |
| 99 | Registration items occupy too much memory capacity. | Reduce the number of registration items. |
| 100 | Universal serial: GD-80 compatible entry mode is set. | Deselect [GD-80 Compatible] from the entry mode part. |
| 101 | Universal serial: System device memory setting error | Check whether or not access to the outside of the specified device memory address is attempted, such as by macro indirect designation. |
| 102* | Connection mode setting error | Contact your local distributor. |
| 103* | Network I/O size setting error | |
| 104* | Network table setting error | |
| 120 | The connection port for Multi-link2 does not match the setting for [Connect Port] in the [Multi-link2] window. | Check the connection port setting in the [Multi-link2] window. |
| 121 | Multi-link2 station number error. The value for [Local Port No.] or [Total] is out of the range of 1 to 4. | The value for [Local Port No.] or [Total] in the [Multi-link2] window is out of the range of 1 to 4. Set [Local Port No.] or [Total] within the range of 1 to 4. |
| 122 | Multi-link program is not registered. | Transfer the multi-link program. |
| 123 | Multi-link2 program is not registered. | |
| 127 | MONITOUCH does not support the remote desktop window display. | Check whether MONITOUCH is a model that supports the remote desktop window display. If not, remove the setting. |
| 130* | Ethernet: Network byte error | Contact your local distributor. |
| 131 | Ethernet: The local station number is not set in the table. | Check the station number in Local mode, and check that it is also set in the network table edit window. |
| 132 | Ethernet: The connection target is not registered or is different. | Check the settings in [PLC Table] under [Hardware Setting] → [Target Settings]. |
| 133 | Ethernet: IP address No. error | Check the IP address in the network table edit window. |
| 134 | Ethernet: Port No. error | Check the port number setting in the network table edit window. |
| 135 | FL-net: FL-net data error | Check the FL-net settings in the [Hardware Setting] window. |
| 136 | IP address setting error: The network table number selected for the local station IP address is not registered. | Check the network table number. |
| 137 | The Ethernet port number of the I/F driver is not unique. | Set a unique port number for the I/F driver. |
| 138 | The remote desktop table is not registered. | Register the remote desktop table with the specified number. |
| 139 | The remote desktop table is not set correctly. | Check the remote desktop table settings again. (Check, for example, whether an unregistered remote desktop table number is specified.) |
| 140 | The I/F driver version of MONITOUCH does not match the version of the MONITOUCH system program. | Check that the MONITOUCH system program version is compatible with the device connected, and if necessary, update the system program. |
| 141* | Multi-link2 connection is set. | Contact your local distributor. |

| Error No. | Contents | Solution |
|---|---|---|
| 142 | I/F driver not registered | Transfer the I/F driver.<br>Or check the device memory of the item. |
| 143 | The device memory map number is not set in the [Logging Server] window. | Check the device memory map settings, and set correctly. |
| 145 | The device memory map number set in the [Logging Server] window is not unique. | Check that the number is not duplicate in the [Logging Server] window, and set correctly. |
| 146* | Device memory map memory setting error | Contact your local distributor. |
| 150 | The ladder monitor program is not registered. | Transfer the ladder monitor program. |
| 151 | Ladder monitor program: Model setting error | Check the PLC model of the device connected, and transfer the screen program again. |
| 152 | Ladder monitor program: Unsupported language | Check the MONITOUCH model and the language set in the screen program, and set correctly. |
| 155 | FROM data unregistered | The "default.dtm" file has not been transferred although the [Use Internal Flash ROM as Back-up Area] checkbox is selected in the [System Setting] → [Unit Setting] → [General Settings] tab window.<br>As another possibility, no station number table is found although [Yes] is selected for [Use Port Number Table] under [Communication Setting] in the [Hardware Setting] window.<br>When [Yes] is selected for [Use Port Number Table], the capacity of Local mode extended program becomes 66 KB smaller than the case where it is not selected. Check the setting.<br>If the capacity is the same in either case, contact your local distributor. |
| 156 | "Backup area" and "station number table" cannot be used at the same time. | [Use Internal Flash ROM as Back-up Area] is selected in the [System Setting] → [Unit Setting] → [General Settings] tab window although [Yes] is selected for [Use Port Number Table] under [Communication Setting] in the [Hardware Setting] window.<br>It is not possible to use both functions at the same time. Deselect either function, and transfer the screen program again. |
| 157 | There are duplicated station numbers in the station number table. | Be sure to set unique numbers when the station number table is changed using the FROM_WR macro command. |
| 158 | The model set for ladder monitor program is not consistent with the one for ladder data. | Transfer the ladder data of the correct model. |
| 159 | PLC ladder data is incorrect. | Transfer the ladder data again. |
| 160 | The SRAM area size exceeds the available range. | Check the settings in the [System Setting] → [Unit Setting] → [SRAM/Clock Setting] window. |
| 161 | The SRAM area is not formatted. | Format the SRAM area on the SRAM Setting screen in Local mode.<br>Check that the battery voltage does not drop. |
| 162 | Data in the SRAM area does not match the MONITOUCH system program version. | Check the MONITOUCH system program version, and contact your local distributor. |
| 163 | The SRAM/clock setting does not match the SRAM area format. | Format the SRAM area on the SRAM Setting screen in Local mode. |
| 164 | The simulator program version does not match the MONITOUCH system program version. | Check the MONITOUCH system program version and the compatible simulator program version. |
| 165 | Device memory map data is registered for a model that does not support device memory maps. | Delete the device memory map. |

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| Error No. | Contents | Solution |
|---|---|---|
| 166 | The function set for the serial port is duplicated. | Error : 166 (Header : x)<br>└ Sub-item number<br><br>The sub-item number denotes the ports as shown below:<br>0: CN1<br>1: MJ1<br>2: MJ2<br>Specify a unique function (simulator, etc.) for each port. |
| 174 | The I/F driver that does not support ladder communication is set. | Check that the I/F driver supports ladder communication. |
| 183 | The printer model is not correctly set. | Transfer the printer driver suitable for the model set in the screen program. |
| 184 | Printer driver is not found. | Transfer the printer driver. |
| 187 | Periodical writing or synchronized writing is set in the device memory map number specified in the [Logging Server] window. | Check the data in the device memory map. |
| 188 | The same device memory address is specified for writing in the device memory map number set with periodical writing or synchronized writing. | Check the data in the device memory map. |
| 189 | The Japanese conversion program is not registered in MONITOUCH. | Transfer the Japanese conversion program. |
| 192* | I/F driver setting error | Contact your local distributor. |
| 193* | The common data sheet setting is not registered. | |
| 194* | The memory card setting is not registered. | |
| 195* | V-I/O input/output device memory is not registered. | |
| 196 | Data stored in the storage device is different. | This error may be relevant to the operation for storing data (screen, 3D parts, etc.) in a storage device.<br>Connect a storage device in which data has been stored correctly using the storage manager. |
| 199 | Multiple functions are assigned to the USB port. | Multiple functions are assigned to the USB-B port. Use the USB-B port only for any of the following functions: USB simulator, PictBridge printer, or USB ladder communication function. |
| 201* | Total byte count error | Contact your local distributor. |
| 207 | No video unit is installed. | Install an option unit "GUR-00", "GUR-04", or "GUR-10". |
| 209 | PLC ladder data is not registered. | Transfer the ladder data. |
| 216 | A data sheet includes an item that cannot be printed. | Recheck the data sheet screen. Remove the unusable item. |
| 217 | The source voltage of the touch panel does not conform to the specifications. | Check the source voltage. For details on the power source specifications, refer to the V9 Series Hardware Specifications manual. |
| 301 | Recipe setting error | Check the recipe settings.<br>The specified value is outside the permissible range, or there is a problem with the record name specification method. |
| 302 | The maximum capacity of the alarm server has been exceeded. | The capacity of DRAM specified under [Internal Storage Setting] in the [Alarm Server] window has exceeded the maximum available capacity. Reduce the number set for [Number of Monitoring Alarms] or [Number of Data to Save]. |
| 306 | The SRAM area is corrupt. | Forcibly format the SRAM area from the SRAM Setting screen in Local mode. |

| Error No. | Contents | Solution |
|-----------|----------|----------|
| 310 | An alarm type is not specified for the alarm server. | Check the alarm type setting of monitored alarms for the relevant alarm block number at [System Setting] → [Alarm Server]. |

## Item Name

The item name indicates the screen or other locations where the error was detected.

## Sub-item Number

The sub-item number indicates the number of the screen where the error was detected.

- Logging server/alarm server: 0 to 11 = block No.
- Message: Message group No.
- For graphic library, the following library numbers are shown.

  Graphic group No. × 256 + No. in the group
- Device memory map: xyy (x = PLC1 to 8, yy = table No.)
- I/F driver: 1 to 8 = PLC1 to 8, 9 = simulator
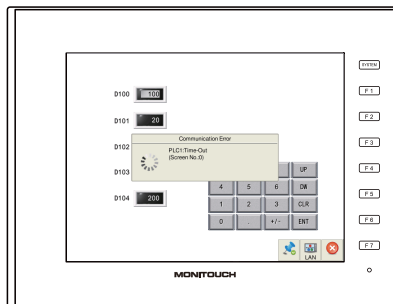
# 3.    Communication Error

When communication is not established between a V9 series unit and a controller, or any abnormality (noise etc.) is detected, the communication error screen is displayed on the V9 series unit.
The display of an error differs depending on the option selected for [Comm. Error Handling].

* The setting for [Comm. Error Handling] can be checked and changed in Local mode on the V9 series unit.
  For details, refer to "Communication Setting" (page 2-39).

• When [Comm. Error Handling: Stop] is selected:
  Communication will be stopped entirely and the communication error screen will be displayed. The [RETRY] switch is available for attempting reestablishment of communication.
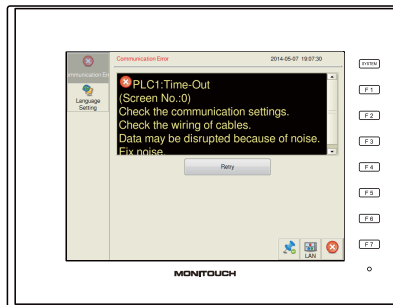


• When [Comm. Error handling: Continue] is selected:
  The communication error message will be displayed at the center of the screen. The same communication will continue until restoration, and screen operation is not allowed then. When communication has been returned to a normal state, the message disappears and screen operation is allowed.



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Error Handling

- When [Comm. Error handling: Disconnect] is selected:
  The status bar appears without displaying any error messages, and indicates the icon for "link not established" for PLC 8WAY connection (page 1-28). When a time-out error is detected, communication is discontinued and the next communication is attempted.

  * Recovery confirmation can be executed for the device for which communication has been discontinued.
    For details, refer to the V9 Series Connection Manual.
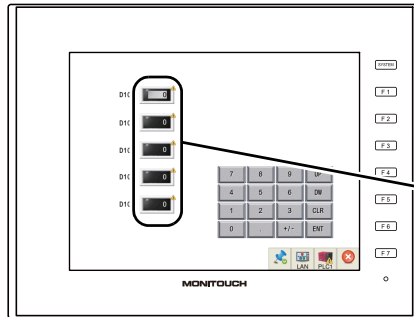


The ⚠ icon appears at the top right corner of the part that monitors the device memory of a device in which a time-out error was detected.

## 3-1.    Error Messages

| Error Messages | Contents | Solution |
|---|---|---|
| Time-Out | Although a request to send is given to a controller, no answer is returned within the specified time. | 1. Check the settings in the [Hardware Setting] → [PLC Properties] window. Check that the cable is correctly connected. |
| | | 2. Data may be disrupted because of noise. Take measures against noise. |
| Parity | An error occurred in parity check. | 1. Check that the cable is correctly connected. |
| | | 2. Data may be disrupted because of noise. Take measures against noise. |
| Framing | Although the stop bit must be "1", it was detected as "0". | 1. Check the settings in the [Hardware Setting] → [PLC Properties] window. Check the cables and wiring. |
| | | 2. Data may be disrupted because of noise. Take measures against noise. |
| Overrun | After receiving one character, the next character was received before internal processing was completed. | 1. Check the settings in the [Hardware Setting] → [PLC Properties] window. |
| | | 2. Data may be disrupted because of noise. Take measures against noise. |
| Check code error | The check code in the controller response was not correct. | 1. Check the settings in the [Hardware Setting] → [PLC Properties] window. |
| | | 2. Data may be disrupted because of noise. Take measures against noise. |
| Error code received | An error code was sent by a controller. (NAK) | Examine the controller error code and solve the problem. |
| Breakage detected | The controller's SD remains at the low level. | Examine the connection between the controller's SD and the V9's RD. |
| Invalid memory (Mitsubishi CPU, or other equipment) | An address outside the permissible range of the connected PLC was specified. | Check the type and range of the specified device memory. |
| Invalid CPU Model (Mitsubishi ACPU) | There is no CPU that corresponds to the PLC currently supported. | Check whether or not the CPU currently in use can be used with the V9 series. |
| Format | The code of the received data was different from the specified code. | 1. Confirm link unit settings. (After making settings, turn off the power to each controller.) On the V-SFT version 6 editor, select [System Setting] → [Hardware Setting], and check the settings.<br><br>2. If errors only occur from time to time, data may be disrupted because of noise. Take measures against noise. |
| Compare (Hitachi HIDIC-S10) | Transmitted data and received data were inconsistent. | |
| NAK | The V9 series unit judged that communication is impossible. | |
| Transaction Error (Allen-Bradley PLC) | Transmitted transaction data and received transaction data were inconsistent. | |
| Count error (Mitsubishi CPU/Sharp CPU) | The expected data amount was different from the count value. | |
| Command error (Mitsubishi CPU) | The response code was different from the expected code. | |
| Invalid Cassette (Mitsubishi ACPU) | There is no memory cassette that corresponds to the cassettes currently supported. | Contact your local distributor. |
| CPU Type Error (Mitsubishi CPU) | Unsupported CPU type (incorrect password) | Check whether or not the V9 series unit supports this CPU. |
| Unsupported CPU (Siemens S5) | Unsupported CPU type | |
| Invalid DB (Siemens S5) | The corresponding DB cannot be found in the CPU. | Check if the corresponding DB exists using the ladder tool. If the DB does not exist, create it using the ladder tool. |

\*  If the above error messages are displayed on the V9 series unit without establishing communication between V9 and PLC, test the solution "1". If the error occurs suddenly during communication, test the solution "2".

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Error Handling

## Ethernet-specific Errors

| Error Messages | Description | Solution | $s518* |
|---|---|---|---|
| Send Error | The UDP socket port cannot be allocated. | Check that the setting on the target station is consistent with the network table setting. | 201 |
| Failed to create a TCP socket. | The TCP socket cannot be created. | Turn the power off and back on again, or check the communication settings, for example, duplication in port numbers. | 203 |
| The number of TCP connections exceeded the limit. | The maximum number of connections (256) has been established, and no more connections are allowed. | Check the communication lines. | 204 |
| Cannot establish TCP connection. | Connection cannot be established. | Check the communication lines, or turn the power off and back on again. | 205 |
| TCP Communication Error | TCP communication has failed. | Check the communication lines. | 207 |
| The connected device has shut down the TCP connection. | The TCP connection is disconnected by the connected device. | Check the connected device and communication lines. | 208 |
| Link Down | The Ethernet cable is not connected to the V9 series unit. | Connect the Ethernet cable to the V9 series unit. Check the link check LED on the hub. If not lit, check the cable wiring and connection status as well as the port settings in the network table. | 801 |
| MAC address not registered. | The MAC address is not registered. | Repair is necessary. | 1202 |
| Undefined Error | An unknown communication error was detected. | Turn the power off and back on again. If the problem persists, a fault is suspected. Contact your local distributor. | 2001 |

\* The current status of Ethernet communication is stored in system device memory $s518.
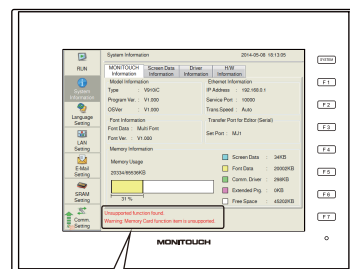0:             Normal
Other than 0:   Error

## Errors When Using a Communication I/F Unit

Refer to the respective V9 Series Communication Unit Specifications.

## 4.       Warning

"Warning" may be displayed in Local mode.
Select [Tool] → [Error Check] in V-SFT version 6, and correct the screen program by checking the details of the error as well as the solution.



Unsupported function found.
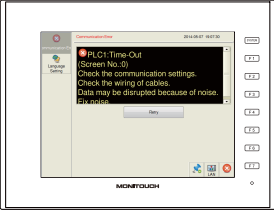Warning: Memory Card function item is unsupported.
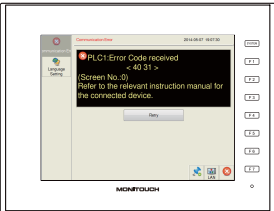
# 2. Troubleshooting
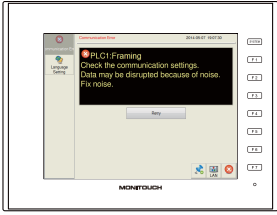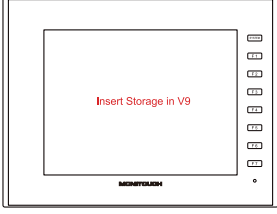
## In the Event of an Error

Perform the steps below:

1.  If the current error matches a symptom in the following table, correct it by following the instructions provided.

2.  If the error does not match the symptoms in the table, contact your local distributor (specified on the back cover).
    Please provide the distributor with the detailed information, such as a MONITOUCH model, serial number, symptom of the error and error message displayed on MONITOUCH.

## Probable Symptoms

| Symptoms | Causes | Solutions |
|---|---|---|
| MONITOUCH is connected to controllers; however, communication fails. "Communication Error: Time-Out" appears on the screen.  | 1) Cables are not connected correctly or any cable is disconnected. | 1) Check the cable connection. |
| | 2) Parameter settings in the controller are not correct or disagree with the V9-series settings. | 2) Recheck the parameter settings in the controller. |
| | 3) If the error occurs suddenly during normal communication, data may be disrupted because of noise. | 3) Check if appropriate measures are taken against noise.<br><br>Example:<br>• Check if communication cables are bundled together with power cables.<br>• Try to attach a ferrite core to the communication cable.<br>• Try to attach a noise filter to the power supply, etc. |
| | 4) MONITOUCH is faulty. | 4) Return MONITOUCH to your local distributor. |
| "Communication Error: Error Code received" appears on the screen.  | The error code denotes a controller error (NAK).<br><br>1) When the error code appears only on a certain screen, a device memory address that does not exist on the controller may be set on the V9-series screen. | 1) Check if any address outside the permissible range of the controller device memory is specified on the screen. |
| | 2) When the error code appears at power-on, the device memory address that does not exist in the controller may be specified for an area commonly used by all screens, such as a control area ([System Setting] → [Hardware Setting] → [Control Area]), logging server, alarm server and initial macro specified in V-SFT version 6. | 2) Check if any address outside the permissible range of the controller device memory is specified for an area commonly used by all screens, such as a control area ([System Setting] → [Hardware Setting] → [Control Area]), logging server, alarm server and initial macro specified in V-SFT version 6. |

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Error Handling

| Symptoms | Causes | Solutions |
|---|---|---|
| Communications have been successful. However, "Communication Error: Parity" or "Communication Error: Framing" suddenly occurs.<br><br> | Noise may cause the error. | Check if appropriate measures are taken against noise.<br><br>Example:<br>• Check if communication cables are bundled together with power cables.<br>• Try to attach a ferrite core to the communication cable.<br>• Try to attach a noise filter to the power supply, etc. |
| "Communication Error: Simulator: Time-Out" appears on the screen.<br><br> | Simulator communications between V9 and PC is not successful. | 1) For communication with a PLC<br>Select [Not use] on the Simulator Setting screen in Local mode (page 2-48).<br>Or deselect the [Use Simulator] checkbox on the [Transfer] window of V-SFT version 6, and transfer the screen program again.<br><br>2) For communication with simulator<br>Select the [Use Simulator] checkbox on the Simulator Setting screen in Local mode (page 2-48).<br>Or select [Transfer] → [Simulate] in V-SFT version 6 to start the simulator. |
| "Insert Storage in V9" is displayed on the screen.<br><br> | No storage device is inserted in the V9 series unit although a setting is made to automatically upload a screen program from the storage device when the power to the V9 series unit is turned on. | 1) When enabling auto-upload<br>Check that the storage device is correctly inserted.<br>Check that data files to be uploaded automatically are stored in the storage device.<br>* For details on auto-uploading using a storage device, refer to the V9 Series Reference Manual 2.<br><br>2) When disabling auto-upload<br>Turn the power to the V9 series unit off and set the DIP switch 1 (on the back of the unit) to the off position. |
| The screen becomes dark or black. | 1) Touching the screen restores it to the previous illuminated state.<br>↓<br>The backlight operates automatically as preset.<br><br>2) Touching the screen does not restore it. But the POWER lamp is lit.<br>↓<br>The backlight may be at the end of its life. Or MONITOUCH may be faulty. | 1) Change the time to turn off the backlight. The backlight can be controlled using V-SFT version 6 or on the V9 series unit (page 2-50).<br><br>2) Return MONITOUCH to your local distributor. |
| The POWER LED does not light up, or flashes.<br>(Only on Standard/Lite models) | 1) The power is not correctly supplied to the V9 series unit.<br><br>2) The POWER LED is faulty. (The screen functions normally.)<br><br>3) MONITOUCH is faulty. (The screen is black.) | 1) Check that the correct voltage and current are supplied.<br><br>2) Return MONITOUCH to your local distributor.<br><br>3) Return MONITOUCH to your local distributor. |

**3**

| Symptoms | Causes | Solutions |
|---|---|---|
| Switches do not work. | 1) Switches do not work in RUN mode. A beep sounds.<br>↓<br>The switch interlock is enabled. Switch settings are incorrect. | 1) Check the settings of switch functions, etc. on V-SFT version 6. |
| | 2) Switch activation position is wrong.<br>On the touch switch test screen in Local mode (page 2-68), a position different from the pressed position is activated.<br>↓<br>The switch activation position may be misaligned. | 2) Perform a touch switch adjustment (page 2-69). |
| | 3) Switches do not work even in Local mode.<br>No part of the touch switch test screen in Local mode (page 2-68) is activated when pressed.<br>↓<br>MONITOUCH switches may be faulty. | 3) Return MONITOUCH to your local distributor. |
| The storage device is not recognized on the V9 series unit. | 1) The format type of the storage device is different. | 1) The format type of the storage device available with the V9 series is FAT or FAT32. Check the format type of the storage device on the PC. If it is different, format the storage device again to either format type. |
| | 2) An error code is stored in $s497. ($s1035 when the USB-A port is used) | 2) Check the value stored in system device memory $s497 or $s1035. (Assigning these addresses to the numerical data display part enables monitoring.) A value other than "0" indicates an error.<br>For details on error codes, refer to the V9 Series Reference Manual 1. |
| | 3) The storage device is faulty. | 3) Check whether or not the storage device can be accessed from the PC. If not, use other storage device. |
| The screen program cannot be transferred. | 1) Serial transfer has never been succeeded.<br>↓<br>There may be some errors in the settings on the PC. | 1) In the [Transfer] window on V-SFT version 6, decrease the baud rate by one level. Also check that the correct COM port is selected. |
| | 2) Only serial transfer is successful.<br>↓<br>There may be some errors in the Ethernet or USB settings. | 2) Transfer via Ethernet<br>Check that the IP address set on V-SFT version 6 is the same as the one set on MONITOUCH.<br>Also check if any error due to Ethernet connection occurs on MONITOUCH.<br><br>Transfer via USB<br>Is the USB driver identified? Is the driver installation successfully finished?<br><br>If the problem persists, contact your local distributor. |

| Symptoms | Causes | Solutions |
|---|---|---|
| The system menu cannot be displayed in RUN mode. | • For Advanced models<br>  Any of the following parts are placed in the corners of the screen.<br>  Switches, data display parts with switches, display areas, slider switches, scroll bars, and table data display parts<br>  The display area of a scrolling message part is in the corner of the screen.<br>• For Standard/Lite models<br>  The [SYSTEM] switch is prohibited. | • For Advanced models<br>  Be sure to press a corner where none of the items given on the left are placed. If items are placed in all four corners of the screen, switch the screen to one that has open corners and perform the procedure to display the system menu.<br><br>• For Standard/Lite models<br>  To enable the [SYSTEM] switch, hold down the [F7] switch with the [SYSTEM] switch for the time specified for [Change-over Time] (max. 30 seconds). ([Change-over Time] is set in the screen program.) |
| The RUN mode cannot be switched to Local mode even by pressing the [Local] switch on the system menu. | The changeover time is specified in the screen program. | Hold down the [Local] switch on the system menu for the specified changeover time (max. 30 seconds). |
| (Only on Standard/Lite Models) The [Local] switch is not displayed on the system menu displayed in RUN mode. | [Mode Switch Prohibited] is selected. | Hold down the [F1] switch with the [F7] switch for the time specified for [Change-over Time] (max. 30 seconds). ([Change-over Time] is set in the screen program.) |
| The status bar cannot be displayed in RUN mode. | [Status Bar Prohibited] is selected. | Deselect [Status Bar Prohibited] in the [System Setting] → [Unit Setting] → [System/Mode Switch] tab window in V-SFT version 6. |
| The message "Battery changeover required" is displayed in Local mode. | 1) The time to replace the battery is approaching.<br><br>2) No battery is set. | 1) Replace the battery with a new one by referring to the V9 Series Hardware Specifications manual.<br><br>2) Data in the SRAM area or built-in clock data cannot be retained unless power is supplied.<br>Refer to the V9 Series Hardware Specifications manual and set a battery. |