

5-2 Error Messages

If one of the messages listed on the following table is displayed on the PT, find the symptoms of the error below and then perform the suggested countermeasures.

5-2-1 Troubleshooting Data Transfers from the NS-Designer

This section describes possible errors during data transfer and their countermeasures.

| Message | Cause | Possible countermeasure |
|--|---|--|
| Either Screen Data Transfer or Memory Card Transfer is already started up. Cannot start up both programs at once. | Tried to start both Memory Card Transfer and Screen Data Transfer. | Only one transfer program can be started at a time. |
| Project file name is too long. It should be within 42 characters. | Project file name (*.IPP) contains 43 or more characters. | There are limits on transferable file names. Check the error message and use NS-Designer to adjust the file name accordingly. There are similar limits on notation for text files indirectly accessed. |
| Project file name contains invalid characters. Usable characters are alphanumeric (0 to 9, A to Z, a to z), dollar sign (\$), underscore (_), and period (.). | File name contains invalid characters. | There are limits on transferable file names. Check the error message and use NS-Designer to adjust the file name accordingly. There are similar limits on notation for text files indirectly accessed. |
| Downloading aborted. This project includes the file which name contains invalid character. Usable characters are alphanumeric (0 to 9, A to Z, a to z), dollar mark (\$), underscore (_), and . Check the project file and correct it. | File name contains invalid characters. | There are limits on transferable file names. Check the error message and use NS-Designer to adjust the file name accordingly. Only one period (.) before the extension will be valid. There are similar limits on notation for text files indirectly accessed. |
| System Program Version differs. Do you want to continue downloading? Source: X.XX Destination: X.XX | The system version of the NS-Designer and PT are not the same. | If the system Program cannot be replaced by using automatic download of the PT, use the procedure in section 3-6-3 of the <i>NS Series -V1 Setup Manual (V083-E1-□)</i> . |
| Time-out error occurred. Check cable. Perform transmission again after restarting NS Hardware | Timeout occurred during PT connection or transfer. | Check the following items. PT power supply. Cable connection. |
| NS Hardware is already connected. Restart the NS Hardware to change the communication method. | Tried to use a different communications method while personal computer and PT connected (e.g., tried to switch to Ethernet and connect during serial communications). | Restart the PT and make the new connection. |
| Cannot establish connection with the specified communication method. (If the error persists after the suggested countermeasures are performed, close the application and restart the personal computer then try connecting again.) | Connection failed. | Check the following items. PT power supply. Cable connection. |
| | Pressed Connect Button even though some items remain unset under the Communications Method Settings Dialog Box. | Make correct settings for unset items and connect again. |

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| Message | Cause | Possible countermeasure |
|--|--|---|
| Error occurred while writing to a flash memory Transmission failed | Data cannot be written. | Initialize data using <i>Screen data area format</i> on the Initialize Tab Page under System Menu and transfer the project. |
| Cannot find Project file at NS Hardware. Transmit the whole project again. | Cannot find project data on PT. | Resend the whole project. |
| Project file differs between transmission source and destination. Select the whole project and perform transmission again. | Tried to send separately a different project screen to the project stored on the PT. | With separate screen transfers, one project screen cannot be sent individually to a PT that stores a different project. Select the whole project and resend. |
| The capacity of NS Hardware is insufficient. Transmission failed. | The created project exceeds the storage capacity of the PT. | Reduce the size of the screen data and retransfer the project. |
| Cannot delete screen file in NS Hardware. | Could not delete PT screen file. | Initialize data using <i>Screen data area format</i> on the Data Initialize Tab Page under System Menu and transfer the whole project. |
| File size exceeded the maximum. Please check the Project data. | Transferable file size exceeded. | The maximum size file that can be transferred is 1.44 MB. Re-execute the transfer with a file smaller than 1.44 MB. |
| Cannot open COM port. | COM port used by another application. | Close the other application and try the connection again. |
| Failed to start the CX-Server. | CX-Server may not be installed correctly. | CX-Server may not be installed correctly. Refer to <i>Section 2 Setup, Starting, and Exiting NS-Designer</i> in the <i>NS-Designer Operation Manual</i> and uninstall CX-Server then reinstall NS-Designer and CX-Server. |
| Failed to process the CX-Server. | CX-Server may not be installed correctly. | CX-Server may not be installed correctly. Refer to <i>Section 2 Setup, Starting, and Exiting NS-Designer</i> in the <i>NS-Designer Operation Manual</i> and uninstall CX-Server then reinstall NS-Designer and CX-Server. |
| Error detected at NS Hardware. (0x03a6) | Unexpected error. | The PT may need repaired. Contact your nearest OMRON representative. |
| NS hardware error. | Possible PT hardware error. | The PT may need repaired. Contact your nearest OMRON representative. |

5-2-2 Troubleshooting Errors when Turning ON Power

This section describes possible errors immediately after power is turned ON to the PT and the countermeasures for these errors.

| Message | Cause | Possible countermeasure |
|--|--|--|
| FATAL ERROR No. 01: Touch Panel is not connected: Please contact your OMRON service center. | Touch panel error. | The PT may need repaired. Contact your nearest OMRON representative. |
| FATAL ERROR No. 02: SRAM Initialization Error: Please contact your OMRON service center. | Hardware error in log SRAM. | |
| FATAL ERROR No. 03: MAC Address Error: Please contact your OMRON service center. | Incorrect MAC address. | |
| FATAL ERROR No. 04: PT Model type Identify error. | The PT model cannot be determined. | The PT may need repaired. Contact your nearest OMRON representative. |
| ERROR No. 10: File System Error: Please recover the system program. | File system is corrupted. (A hardware fault occurred or power was interrupted during writing.) | Reinstall the system program by inserting the Memory Card containing the recovery program in the PT and resetting the PT or turning the power supply OFF and ON again. (Refer to 3-6 <i>Using Memory Cards</i> in the Setup Manual.) If the same problem occurs after reinstalling the system program, the PT may need repaired. Contact your nearest OMRON representative. |
| ERROR No. 10: Fail in loading files or executing program: Please recover the system program. | File reading or program execution failed. | |
| ERROR No. 10: Fail in loading files: Please recover the system program. | File reading failed. | |
| ERROR No. 11: Fail in loading files: Please reinstall the system program. | File reading failed. | |
| ERROR No. 11: Device check program error: Please reinstall the system program. | Hardware check program is corrupted. | |
| ERROR No. 11: SRAM check program error: Please reinstall the system program. | Log SRAM check program is corrupted. | |
| ERROR No. 11: IP Address Setting Error: Please reinstall the system program. | IP address setting program is corrupted. | |
| ERROR No. 11: Device check program error: Touch the screen to continue. | At startup with DIP switch 6 set to ON, the hardware check program is corrupted. | The Memory Card transfer program started up after this can be used. If operation is not restored after continuing with the Memory Card transfer program, insert the Memory Card containing the recovery program in the PT and reset the PT or turn the power supply OFF and ON again. (Refer to 3-6 <i>Using Memory Cards</i> in the Setup Manual.) If the same problem occurs after reinstalling the system program, the PT may need repaired. Contact your nearest OMRON representative. |

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| Message | Cause | Possible countermeasure |
|---|---|---|
| ERROR No. 12: Fail in loading fonts: Please reinstall the system program. | Reading of font files when operation performed with DIP switch 6 set to ON failed. | Download the system program by automatic download that does not use DIP switch 6. If operation is not restored after downloading, insert the Memory Card containing the recovery system program in BANK 1 in the PT. (Refer to 3-6 <i>Using Memory Cards</i> in the Setup Manual.) If the same problem occurs after reinstalling the system program, the PT may need repaired. Contact your nearest OMRON representative. |
| ERROR No. 12: Installed system program is not applicable for this hardware: Please reinstall the system program. | The installed system program does not match the hardware. | Touch the touch panel to continue booting. Then set the correct date in the System Menu. |
| WARNING No. 20: Date and Time are not set: Touch the screen to continue. | Date set outside the PT's allowable range of 2000 to 2049. | |
| WARNING No. 21: SRAM previously broken... Initialization Complete: Touch the screen to continue. | SRAM contents could not be held because the battery was not connected or there was insufficient capacity. For this reason, SRAM was initialized. | Touch the touch panel to continue booting. Replace the battery the next time power is turned OFF. |
| WARNING No. 22: Memory Card Error: Some files in a memory card may be corrupted. Safely remove the memory card, and check whether files are not corrupted on a computer. You can continue to startup the PT by touching on the screen, however, it may NOT operate correctly when accessing to the memory card. (The same message will also be displayed in Japanese. This is not a fault.) | The two following causes are possible: The previous time the PT was used, power was turned OFF while accessing the Memory Card. Memory Card access safety information could not be held because the battery was connected or there was insufficient capacity. | Touch the touch panel to continue booting. When the Memory Card is accessed, however, the PT may not operate normally. |
| WARNING No. 23: Screen data file(s) is not correct: Touch the screen to continue and transfer screen data again. | The screen data in the PT is damaged. (The PT power supply was turned OFF while screen data was being transferred, or a cable was disconnected.) | Touch the PT's touch panel, and after <i>connecting</i> is displayed at the bottom right of the screen, or after the message "No project data is registered. Press OK button and download project data." is displayed, reattempt screen transfer. |

5-2-3 Troubleshooting Errors at Startup

This section describes possible errors after power is turned ON to the PT, when operation is started, and during operation and the countermeasures for these errors.

| Message | Cause | Possible countermeasure |
|---|--|--|
| No project data is registered. Press OK button and download project data. | Cannot read project data (not transferred or corrupted). | Download the project data. |
| No project data is registered. Press OK button and download project data. | | |
| Failed to read host registration. Correct host registration with NS-Designer. Then, press OK and download project data. | Cannot read project data (not transferred or corrupted). | Download the project data. |
| Initial Screen does not exist. Please set correct screen number in [Project] tab of System Menu. | No initial screen data. | Download screen data. |
| | | Check that the screen exists with the number set under <i>Initial screen number</i> on the Project Tab Page under the System Menu. (The default screen number is 0.) |
| Cannot open pop-up screen without opening the base screen. | Specified pop-up screen as screen to be displayed at startup. | Specify a base screen as the initial screen number on the Project Tab Page under the System Menu and restart the PT. |
| Although Data Block Table exists on the screen, failed to read CSV file to display on Data Block Table. [Data Block (x) CSV file] The object will not be displayed correctly. | The CSV files set for the data block does not exist. | Create the CSV file for the data block in the project folder. |
| Video Board is not mounted on the PT or an error occurred. Although Video Display exists on the screen, the object will not be displayed correctly. | A Video Input Unit is not installed. | Install a Video Input Unit correctly according to the procedure in 3-6 <i>Installing a Video Input Unit</i> in the <i>NS Series Setup Manual</i> . |
| | The Video Input Unit is faulty. | Contact your nearest OMRON representative. |
| The mounted video board and the settings do not match. Please check the video board or settings. | The Video Board mounted in the PT is not the one specified in the project. | Use Support Software to revise the project data while referring to 7-1 <i>Settings</i> in the <i>NS-Designer Operation Manual</i> , and then download the data. |

5-2-4 Troubleshooting Errors when Switching Screens

This section describes possible errors when PT screens are switched and the countermeasures for these errors.

| Message | Cause | Possible countermeasure |
|---|--|---|
| Page file load error. (Page: xxx, ERR: xxx) (Page: Destination page number; ERR: Error code) | Cannot find specified screen file (ERR:-1). | Correct the destination screen number. Alternatively, download the corresponding screen data. |
| | Open error for specified screen file (ERR: -2). | Download the project data again. |
| | Cannot reserve buffer for reading screen header (ERR:-10). | Download the project data again. |
| | Cannot reserve buffer for reading screen data (ERR:-11). | Download the project data again. If the error persists after the data has been downloaded again, the screen data is too large for the memory capacity. Reduce the size of the screen data file by reducing, for example, the number of objects on the screen. |
| | Cannot reserve buffer for reading macro data (ERR:-12). | Download the project data again. |
| | File read error (screen header part) (ERR:-20). | Download the project data again. |
| | File read error (macro data part) (ERR:-21). | Download the project data again. |
| | Screen file ID error (ERR:-30). | Download the project data again. |
| | Screen file version error (ERR:-40). | Execute <i>Save all</i> under the NS-Designer File Menu and download the project data again. |
| | File read error (functional object header part) (ERR:-102). | Download the project data again. |
| | Functional object type error (ERR:-103). | Download the project data again. |
| | File read error (functional object properties part) (ERR:-14). | Download the project data again. |
| | Cannot reserve buffer for reading functional object data (ERR:-105). | Download the project data again. If the error persists after the data has been downloaded again, the screen data is too large for the memory capacity. Reduce the size of the screen objects data file by reducing, for example, the number of objects on the screen. |
| Video Board is not mounted on the PT or an error occurred. Although Video Display exists on the screen, the object will not be displayed correctly. | A Video Input Unit is not installed. | Install a Video Input Unit correctly according to the procedure in 3-6 <i>Installing a Video Input Unit</i> in the <i>NS Series Setup Manual</i> . |
| | The Video Input Unit is faulty. | Contact your nearest OMRON representative. |

Reference

- ◆ If a screen switching error occurs, the current pop-up screen will automatically close.
- ◆ The number of communications points (bits and words) is the total number of addresses (in host and internal memory) set to functional objects in displayed screens, sheets, and pop-up screens and alarms/events and data logs.

If the same address is used multiple times, that address is counted for each time it is used. Addresses used in macros, however, are not counted. Addresses allocated in system memory are not counted either.

Example: To display the following screen data

- Allocate host DM00000 to system memory \$SW0. (Zero communications points (words) used.)
- Screen 1: Create 10 bit lamps and set bits \$SB0 to \$SB9 to each. (10 communications points (bits) used.)
\$W0 used by macro for screen loading. (0 words used.)
Sheet 0 applied. Set pop-up screen 10 to be opened at the same time.
- Sheet 0: Create one ON/OFF Button to which \$SB10 is set. (1 bit used.)
\$W1, \$W2, and \$B20 used by touch ON macro for this ON/OFF Button.
(0 bits/words used.)
- Screen 10: Create 10 numeral display and input objects, to which \$W10 to \$W19 are set. (10 words used.)
Alarm/event: Set 20 points, \$B0 to \$B19. (20 bits used.)
- Data log: Standard logging of 10 words, \$W100 to \$W104. (10 words used.)

A total of 51 communications points (bits and words) are used.

5-2-5 Troubleshooting Errors for Functional Objects

This section describes possible errors during operation of functional objects and their countermeasures.

| Message | Cause | Possible countermeasure |
|--|--|--|
| Input date is incorrect. | Input error when changing date using date object. | Press the OK Button and input the correct date. |
| Input time is incorrect. | Input error when changing time using time object. | Press the OK Button and input the correct time. |
| Exceeding maximum limit. | Incorrect input to numeral display and input object. | Press the OK Button and return to the original screen. Input data below the upper limit. |
| Exceeding minimum limit. | Incorrect input to numeral display and input object. | Press the OK Button and return to the original screen. Input data above the lower limit. |
| Input data is incorrect. | Incorrect input. | Input the data again. |
| Password error. | Incorrect password input. | Press the OK Button and input the correct password. |
| Wrong passwords are entered three times. Password operation cancelled. | Incorrect password input. | Press the OK Button and display the password input screen again. Input the correct password. If you have forgotten the password, use NS-Designer to reset the password. Use the Password Tab Page under the System Menu to change the password if required. |
| Memory Capacity insufficient. Cannot continue operation. | Insufficient memory. | Reduce the data size by reducing number of screen objects, reducing the size of the displayed BMP file, or similar measures. |
| Failed to save to a file. | Failed to save CSV file from data log graph. | Insert a Memory Card with sufficient free space into the PT. Check to see if the Memory Card is damaged. |
| Failed to read file. [Data Block (Data Block No.) CSV File] | Failed to read data file at Data Block Table. | Create CSV file set for Data Block Setting under Project folder. |
| Failed to write to the file. [Data Block (Data Block No.) CSV File] | Failed to write data file at Data Block Table. | Create CSV file set for Data Block Setting under Project folder. |
| Cannot add any more. | Attempt to add more than the maximum number of the records using Add to the record icon. | Increase the maximum number of records for Data Block at Data Block Setting in NS-Designer. |
| Cannot write to Memory card. Confirm that Memory card is inserted. | Failed to write the file from Data Block. | Check whether or not Memory card is inserted or corrupted. |
| | Failed to save the file when performing Video Capture. | |
| Stop logging data before reading the CSV file. | The Read File icon was pressed during data logging. | When reading a CSV file, stop logging and then press the Read File icon. |

5-2-6 Troubleshooting Errors during System Menu Operation

| Message | Cause | Possible countermeasure |
|---|---|---|
| Error occurred while formatting screen data range. | Hardware failure. | Contact your nearest OMRON representative. |
| Failed to save to a file. | File system damaged. | Format the screen data area and transfer the screen data again. |
| The address set at CH type selection is not correct. Check the address and input the correct address again. Allocated host: XXXX Allocated address: XXXX MRES = XXXX, SRES = XXXX. | Set address is incorrect. | Check whether or not an illegal address has been set and set the correct address. |
| Time-out error occurs while downloading by the following case: <ul style="list-style-type: none"> • Disconnection of the connecting cable • Stopped host MRES = XXXX, SRES = XXXX. NS5: Time-out error occurs while downloading Host Allocated host: XXXX | Cable is disconnected. PLC power supply is OFF. | Connect the cable correctly. Turn ON the PLC power supply. |
| The address set at CH type selection is not for writing. Check the address and input the correct address again. Allocated host: XXXX Allocated address: XXXX MRES = XXXX, SRES = XXXX. | Host is in RUN mode. Tried to write to a write prohibited address. | Change to program or monitor mode. Check the address and set the correct address. |
| Other peripheral tool is accessing. Send commands again after access right is released. Allocated host: XXXX Allocated address: XXXX MRES = XXXX, SRES = XXXX. | CX-Programmer or other programming device is connected. | Disconnect the connected programming device. |
| Communication error detected while downloading by the following case: <ul style="list-style-type: none"> • Corrupted data by noise • Transmit error by the host MRES = XXXX, SRES = XXXX. NS5: Communication error detected while downloading the data Allocated host: XXXX | Data corrupted by noise. Invalid host communications command. | Check the cable connection and conduct a continuity test. Exchange the cable if there is a cable error. If necessary, rewire the cable. |
| Registered host information and communication setting are not match. Check the communication setting. | Registered host selected but not connected. | Change the communications settings under the System Menu so that the corresponding port is set. |
| Destination address is incorrect. Check the host information. | The remote address where the host is registered is incorrect. Connected to a different PLC while online. | Check the host registration and, if necessary, use NS-Designer to change the address. |

| Message | Cause | Possible countermeasure |
|---|--|---|
| Cannot cancel error by the following case: <ul style="list-style-type: none"> • Operation mode is not in program mode. • Cause of error at host side is not yet removed. | Not in program mode. Cause of error not cleared on host side. | Change to program mode. Clear error on host side. |
| Writing to this memory is not possible. | Tried to write to AR. | AR is write prohibited. Select another memory area. |
| Cannot write in during RUN mode. | Tried to write in RUN mode. | Change to program or monitor mode. |
| Force ON/OFF is not possible with this address type. | Tried to force ON/OFF DM or EM. | Select another memory area. |
| Cannot connect to this PLC model. | Tried to connect a PLC that cannot be connected to device monitor. | Check the PLC model and change to permissible PLC type. |
| No project data. | Tried to change settings even though there is no project data. | Download the project data. |
| Old password is NOT correct. | Input incorrect previous password when changing password. | Use NS-Designer to check the password and input the correct password. |
| Password input in the confirmation does NOT match with the New Password. | Input the incorrect new password to the Confirmation input field when changing password. | Enter the new password again. |
| Failed to save data to CSV file in a Memory Card. Check the Memory Card. | A Memory Card is not inserted or the Card is not one supported by the PT. | Check to see if a Memory Card is inserted, replace it if necessary, and try to save the data again. |
| Changing value is set as Disable so that the value cannot be changed. | Device Monitor value modification is disabled. | Use the PT Settings Tab Page under the System Menu to enable changes to the values. |
| Changing value is set as Disable so that the Mode cannot be changed. | Device Monitor value modification is disabled. | Use the PT Settings Tab Page under the System Menu to enable changes to the values. |
| Failed to delete the file. | The file is a read-only file. | Clear the read-only setting. |
| Printer error | The printer cable is not connected, the printer power is OFF, or a printer error occurred. | Make sure the cable is properly connected and the power is ON. Eliminate any printer hardware errors, such as an empty paper tray or empty ink cartridge. |
| Failed to stop the Memory Card. It is not ready to be removed. | The Remove Button was pressed while the Memory Card was being accessed. | Wait until the Memory Card stops being accessed, and then press the Remove Button again to remove the Memory Card. |

5-2-7 Communications Errors and Countermeasures

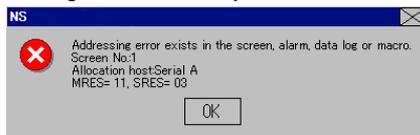
This section describes the communications errors that may occur during operation and possible countermeasures.

PT Operation When Errors Occur

An error message is displayed on the PT when an error occurs, and a buzzer will sound if *Buzzer sound* under the System Menu is set to ON or ERR ON. Error messages are displayed when *Communications auto return* is turned OFF under the System Menu.

User Operation When Errors Occur

Check the error message displayed and press the **OK** Button. When the OK Button is pressed, the screen before the communications error will be returned and operation will restart. Alternatively, the display may automatically switch to the System Menu. Check the settings under the System Menu and change if necessary.



The information in the following table will be displayed, depending on the error.

| | |
|-----------------|--------------------|
| Screen No. : | Screen number |
| Allocated host: | Host name |
| MRES: | Main response code |
| SRES: | Sub-response code |

Reference

- ◆ If *Communications auto return* is set to ON and an error occurs at one port while both ports are being used, the other port will continue communications.
- ◆ When a communications error occurs, press the **OK** Button in the error message to return the original screen. The numeral and other data on the original screen will be the data from before the error occurred.

The following messages are displayed for communications errors.

| Message | Cause | Possible countermeasure |
|---|---|---|
| Addressing error exists in the screen, alarm, data log, or macro. Correct address setting by the NS-Designer. Screen No.: XXXX Allocation host: XXXX MRES=XXX, SRES=XXXX | The set address is invalid. | Press the OK Button to move to the System Menu. Check the communications settings under <i>data check</i> , in particular that the address is valid. Use NS-Designer to change the settings. |
| Time-out error occurs while downloading by the following case: <ul style="list-style-type: none"> • Disconnection of the connecting cable. • Stopped host • Incorrect time-out period. NS5: Time-out error occurs while downloading Host Allocated host: XXXX | The communications cable is not connected properly. The host communications service has stopped. The timeout monitor time is too short. | Check the cable connection and conduct a continuity test. Exchange the cable if there is a cable error. If necessary, rewire the cable. |

| Message | Cause | Possible countermeasure |
|--|---|--|
| <p>Communication error detected while downloading by the following case:</p> <ul style="list-style-type: none"> Corrupted data by noise Transmit error by the host <p>MRES=XXX, SRES=XXXX NS5: Communication error detected while downloading the data Allocated host: XXXX</p> | <p>Data corrupted by noise. Invalid host communications command.</p> | <p>Check the cable connection and conduct a continuity test. Exchange the cable if there is a cable error. If necessary, rewire the cable.</p> |
| <p>Addressing error exists in the screen, alarm, data log, or macro. Correct address setting by the NS-Designer. Screen No.: XXXX Allocation Host: XXXX Allocation Address: XXXX MRES: XXXX SRES: XXXX NS5: Addressing error exists in the screen, alarm, data log or macro. Screen No.: XXXX Allocation Host: XXXX Allocation Address: XXXX MRES: XXXX SRES: XXXX</p> | <p>An illegal address is set.</p> | <p>Press the OK Button to go to the System Menu. Select Data Check to see whether the address is valid and the communications settings are correct. Use NS-Designer to change settings if necessary.</p> |
| <p>Communication error detected while uploading by the following cases: Corrupted data by noise Transmit error by the host Allocation Host: XXXX NS5: Communication error detected while uploading the data Allocation Host: XXXX</p> | <p>Data corrupted by noise Invalid host communications command</p> | <p>Check the cable connection and conduct a continuity test. Replace the cable if there is a cable error, or rewire the cable if necessary.</p> |
| <p>Failed to read host registration. Correct host registration with NS-Designer. Then, press OK and then download project data.</p> | <p>Project data cannot be downloaded (was not transmitted or is corrupted).</p> | <p>Use a Programming Device to repair the data and try to download it again.</p> |

| Message | Cause | Possible countermeasure |
|---|---|---|
| <p>Time-out error occurred while writing by the following case: Disconnection of the connecting cable Stopped host_- Incorrect time-out period Allocation Host: XXXX Do you want to retry? NS5: Time-out error occurred while writing the data Allocation Host: XXXX Do you want to retry?</p> | <p>The communications cable is not properly connected. The host communications service has stopped. The timeout monitoring time is too short.</p> | <p>Check the cable connection and conduct a continuity test. Replace the cable if there is a cable error, or rewire the cable if necessary.</p> |
| <p>Time-out error occurred while writing due to the following: Disconnection of the connecting cable Stopped host_- Incorrect time-out period Allocation Host: XXXX Do you want to retry? NS5: Time-out error occurred while writing to the System Memory Area. Allocation Host: XXXX Do you want to retry?</p> | <p>The communications cable is not properly connected. The host communications service has stopped. The timeout monitoring time is too short.</p> | <p>Check the cable connection and conduct a continuity test. Replace the cable if there is a cable error, or rewire the cable if necessary.</p> |
| <p>Communication error detected while writing by the following case: Corrupted data by noise Transmit error by the host Allocation Host: XXXX Do you want to retry? NS5: Communication error detected while writing to the System Memory Area Allocation Host: XXXX Do you want to retry?</p> | <p>Data corrupted by noise Invalid host communications command</p> | <p>Check the cable connection and conduct a continuity test. Replace the cable if there is a cable error, or rewire the cable if necessary.</p> |
| <p>Communication error detected while writing by the following case: Corrupted data by noise Transmit error by the host Allocation Host: XXXX Do you want to retry? NS5: Communication error detected while writing to the System Memory Area. Allocation Host: XXXX Do you want to retry?</p> | <p>Data corrupted by noise Invalid host communications command</p> | <p>Check the cable connection and conduct a continuity test. Replace the cable if there is a cable error, or rewire the cable if necessary.</p> |

Probable Causes and Possible Countermeasures

Perform the following countermeasures for the displayed cause.

| Errors | Suggested cause as displayed | Possible countermeasure |
|-----------------------------------|---|--|
| Local node error (MRES:01) | Local node not connected to network (SRES:01). | Connect the node to the network. |
| | No token received (SRES:02). | Set the local node within the maximum node address range. |
| | Cannot send because number of retries exceeded (SRES:03). | If tests executed between nodes do not operate normally, check the operating environment again. |
| | Cannot send because allowable number of frames exceeded (SRES:04). | Check the status of the event executed in the network and reduce the number of events in one cycle. Alternatively, increase the number of frames allowed to be sent. |
| | Node address setting incorrect (SRES:05). | Make the correct rotary switch settings. Make sure the node address is not outside the specified range and is not duplicated. |
| | Node address duplicated in network (SRES:06). | Change the duplicated node address. |
| Destination node errors (MRES:02) | Remote node not connected to network (SRES:01). | Connect the remote node to the network. |
| | No Unit for the unit address (SRES:02). | Check the remote unit address. |
| | No third node (SRES:03). | Check the address for the unit used as the third node. Check the third node address in the CMND instruction send data. |
| | Broadcast specified (SRES:03). | Specify only one node as the third node. |
| | Reception concentrated at remote node (SRES:04). | Increase the number of retries or redesign the system so that there is not concentration at the remote node. |
| | Message frame broken (SRES:05). | Increase the number of set retries. Perform an inter-node test to check the noise status. |
| | Response monitor time too short (SRES:05). | Increase the response monitor time parameters. |
| | Send/receive frame discarded (SRES:05). | Check the error history and take the correct action. |
| | Parity error, BBC error, or similar error has occurred (SRES:06). | Set the maximum unit number to 1 or higher for NT Link mode in the PLC Setup. |
| Controller error (MRES:03) | Communications controller error (SRES:01). | Refer to the Unit and Board user's manuals and take the correct action. |
| | CPU error on remote node CPU Unit. (SRES:02) | Refer to the CPU Unit manual and remove the cause of the CPU Unit error. |
| | No response returned because of Board error (SRES:03). | Check the network communications status and restart the Board. If the error persists, replace the Board. |
| | Incorrect Unit number setting (SRES:04) | Make the correct rotary switch settings. Make sure the Unit number is not outside the specified range and is not duplicated. |
| Service unsupported (MRES:04) | The Unit or Board do not support the command code used (SRES:01). | Check the command code. |
| | Command cannot be executed because the model or version is different (SRES:02). | Check the model and version. |

| Errors | Suggested cause as displayed | Possible countermeasure |
|--------------------------------|--|--|
| Routing table error (MRES:05) | No destination address set on routing table (SRES:01). | Set the destination address on the routing table. |
| | Destination unclear because there is no routing table (SRES:02). | Set routing tables to the source, destination, and relay nodes. |
| | Routing table error (SRES:03). | Make the correct routing table settings. |
| | Command used more than 3 levels (SRES:04). | Edit the network or change the routing tables so that the command uses 3 or fewer levels. |
| Command format error (MRES:10) | Command too long (SRES:01). | Check the command format and set the correct command data. |
| | Command too short (SRES:02). | Check the command format and set the correct command data. |
| | The specified number of elements and the number of data to write do not match (SRES:03). | Check and match the number of nodes and the number of data writes. |
| | Different format (SRES:04). | Check the command format and set the correct command data. |
| | Local node relay table or relay node local network table settings incorrect (SRES:05). | Make the correct routing table settings. |
| Parameter error (MRES:11) | No corresponding variable code or EM (SRES:01). | Check command variables and parameter codes and set the corresponding code. |
| | Different access size specification or odd start address specified (SRES:02). | Check the variable and parameter access sizes and set the correct access size. |
| | Start address in processing range for command is in access-prohibited area (SRES:03). | Check the allowable processing range and set the processing range within the allowable range. |
| | End position in processing range for command is outside allowable processing range (SRES:04). | Check the allowable processing range and set the processing range within the allowable range. |
| | Total number of words exceeds limit (SRES:04). | Make the correct data link table settings. |
| | Non-existent program number set (SRES:05). | Check the valid program numbers and make the correct size relationship settings. |
| | Incorrect size relationship for command elements (SRES:09). | Check the command data and set the correct size relationships. |
| | Node not set in common link parameters is set in refresh parameters (SRES:09). | Make the correct data link table settings. |
| | Tried to execute derivative monitor during data trace or tried to execute data trace during derivative monitoring (SRES:0A). | Abort the current processing or wait until it has been completed and then execute the command. |
| | Duplicate node address. (SRES:0A) | Make the correct data link table settings. |
| | Response exceeds maximum response length (SRES:0B). | Check the command format and set the correct number of elements. |
| | Error in set parameters (SRES:0C). | Check the command data and set the correct parameters. |
| | Error in file (SRES:0C). | Check file contents. |

| Errors | Suggested cause as displayed | Possible countermeasure |
|--|---|--|
| Read not possible (MRES:20) | Program area protected. (SRES:02) | Use support software to remove the protection and re-execute the command. |
| | No registered tables (SRES:03). | Set tables. |
| | Table error (SRES:03). | Make the correct table settings. |
| | No data to match search data (SRES:04). | _____ |
| | Non-existent program number set (SRES:05). | Check valid program numbers and set valid number. |
| | No corresponding file on specified file device (SRES: 06). | Check that the file name, including the subdirectory, is correct. |
| | Mismatched data in data being verified (SRES:07). | Check memory contents and write the correct data. |
| | File read failed (SRES:07). | Check file contents. |
| Write not possible (MRES:21) | Cannot access because read-only area. (SRES:01) | If write protected by switch settings, remove the protection and re-execute the command. Write commands cannot be executed for write-prohibited areas. |
| | Program area protected (SRES:02). | Use support software to remove the protection and re-execute the command. |
| | Write prohibited due to automatic data link table settings (SRES:02). | Change the system settings to allow any data link table settings. |
| | Tried to create file when number of files that can be registered has been exceeded (SRES:03). | Delete unnecessary files and then create a new file or create memory area for new files. |
| | Tried to open too many files for system limits (SRES:03). | Close open files and then re-execute the command. |
| | Non-existent program number set (SRES:05). | Check valid program numbers and set valid number. |
| | No corresponding file on specified file device (SRES: 06). | Check file name and re-execute command. |
| | Same file already on specified file device (SRES:07). | Change the write file name and re-execute the command. |
| | Cannot change because change caused error (SRES:08). | _____ |
| Not executable in current mode (MRES:22) | The mode is incorrect. (SRES:01). | Check operating mode. |
| | Cannot execute because data link starting. (SRES:01) | Check the data link startup status. |
| | Cannot execute because data link stopped (SRES:02). | Check the data link startup status. |
| | Different command operating mode (program mode) (SRES:03). | Check PLC and FA computer operating mode. |
| | Different command operating mode (debug mode) (SRES:04). | Check PLC and FA computer operating mode. |
| | Different command operating mode (monitor mode) (SRES:05). | Check PLC and FA computer operating mode. |
| | Different command operating mode (run mode) (SRES:06). | Check PLC and FA computer operating mode. |
| | Not polling node (SRES:07) | Check the polling node on the network. |
| | Different command operating mode (SRES:08). | Check active status of the step. |

| Errors | Suggested cause as displayed | Possible countermeasure |
|-------------------------------|---|---|
| No such device Unit (MRES:23) | No memory (media) for file device (SRES:01). | Mount memory (media). Alternatively, format EM. |
| | No file memory (SRES:02). | Check that file memory is mounted. |
| | No clock (SRES:03). | Check the model. |
| Cannot start/stop (MRES:24) | Data link table not registered or data link table error (SRES:01). | Make the data link table settings. |
| Unit error (MRES:25) | Memory error (SRES:02) | Resend correct data to memory. |
| | Registered I/O and actual I/O configurations different (SRES:03). | Change the actual configuration to match the registered configuration or create the I/O tables again. |
| | Registered number of I/O points or remote I/O points exceeded (SRES:04). | Change the registered number of points so that it will not be exceeded. |
| | Data transfer error between CPU and CPU Bus Unit (SRES:05). | Check that the Unit, Board, and cable are connected correctly and execute the <i>ERROR CLEAR</i> command. |
| | Duplicate number in rack or Unit numbers or I/O address settings under system settings (SRES:06). | Check the system settings and change any duplicate numbers. |
| | Data transfer error between CPU and I/O Unit. (SRES:07) | Check that the Unit, Board, and cable are connected correctly and execute the <i>ERROR CLEAR</i> command. |
| | SYSMAC BUS/2 data transfer error. (SRES:09) | Check that the Unit, Board, and cable are connected correctly and execute the <i>Clear error</i> command. |
| | CPU Bus Unit data transfer error. (SRES:0A) | Check that the Unit, Board, and cable are connected correctly and execute the <i>Clear error</i> command. |
| | Duplicate word settings (SRES:0D). | Verify I/O table data and reset I/O words. |
| | Error during error check of internal memory, Memory Card, or EM file memory (SRES:0F). | <ul style="list-style-type: none"> For internal memory errors, write the correct data and re-execute the command. Memory Card or EM file memory errors indicate that the file data has been corrupted. Execute the <i>Format expansion memory</i> command. Replace the memory if the error is not cleared after the above processing has been performed. |
| | Terminator has not been set (SRES:10). | Make the correct end station settings. |
| No protection (SRES:01). | Protection does not need to be removed because there is no protection on the program area. | |

| Errors | Suggested cause as displayed | Possible countermeasure |
|------------------------------|---|--|
| Command error (MRES:26) | Specified password different from registered password (SRES:02). | Specify the correct registered password. |
| | Protected (SRES:03). | Use support software to remove the protection and re-execute the command. |
| | More than 5 commands processing at command receive node (SRES:04). | Close or stop a service being executed and re-execute the command. |
| | Service executing. (SRES:05) | Close or stop a service being executed and re-execute the command. |
| | Service not executed (SRES:06). | Execute the corresponding service as required. |
| | No authority to execute service (SRES:07). | Local node not in data link. Execute service from node in data link. |
| | No response received due to buffer error (SRES:07). | Restart the Board. Replace the Board if the error persists. |
| | Settings not made before service executed (SERS:08). | Make the required settings. |
| | Required settings not made for command data (SRES: 09). | Check the command format and set the required command data. |
| | Tried to register program using already registered action/transition numbers (SRES:0A). | Change to unregistered action/transition numbers and re-execute the command. |
| | Cause of error not removed (SRES:0B). | Remove the cause of the error and execute the <i>ERROR CLEAR</i> command. |
| Access right error (MRES:30) | Another node has the access right. (SFC online edit using other node FIT is executed or <i>ACCESS RIGHT ACQUIRE</i> or <i>ACCESS RIGHT FORCE ACQUIRE</i> command executed on another node.) (SRES:01) | Wait until access rights are cleared and re-execute the command. (Execute <i>ACCESS RIGHT FORCE ACQUIRE</i> or <i>ACCESS RIGHT RELEASE</i> command to enable execution of original command. Current processing on the node that had access rights may be affected, however.) |
| Abort (MRES:40) | Interrupted by ABORT command (SRES:01). | ————— |

| Errors | Suggested cause as displayed | Possible countermeasure |
|---------------------------|--|--|
| PT memory error (MRES:7F) | Exception error during processing. (SRES:05) | System program corrupted. Download the system program. If the error persists, contact your nearest OMRON representative. |
| | Incorrect element type (SRES:13). | Screen data corrupted. Download screen data. |
| | Incorrect start address. (SRES:1A) | Address outside range has been set. Check the setting data and use NS-Designer to correct the setting. |
| | Insufficient read data buffer (SRES:1B). | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Standby processing failed for exclusive processing. (SRES:1C) | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Insufficient write data elements. (SRES:1D) | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Incorrect end address. (SRES:2B) | Address outside range has been set. Check the setting data and use NS-Designer to correct the setting. |
| | Access method initialization failure (SRES:3C). | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Access method exit processing failure (SRES:3D). | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Incorrect Access Method parameters (SRES:3E). | System program corrupted. Download the system program. If the error persists, the PT may need repaired. Contact your nearest OMRON representative. |
| | Other incorrect subresponse code. | The PT may need repaired. Contact your nearest OMRON representative. |