

# PANEL AND PLC ERROR CODE TABLES



## APPENDIX

# A

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## Introduction

The **C-more** family of touch panels is capable of communicating with a wide variety of Programmable Logic Controllers. **C-more** is capable of communicating over RS232, RS422 and RS485 serial networks as well as Ethernet networks. It communicates with all AutomationDirect PLCs utilizing various protocols. **C-more** also communicates with other brands of PLCs by their different protocols. For a complete list of PLCs and protocols, see **Step 9 – Connect Touch Panel to PLC in Chapter 1: Getting Started**.

As with any network communications, errors will occur. To make it more simple for the user to identify the cause of the possible error, we have provided an error code table for all of the possible errors that **C-more** can detect.

If a **C-more** communications error does occur, the error message will appear across the top of the screen. The **C-more** touch panel also monitors any errors that are generated by the various PLCs that are connected to it. If any of the PLC generated errors are detected, they are displayed across the top of the panel's display embedded as a hexadecimal value in error code P499's message. An explanation of how the specific PLC error is identified in the panel error code P499 is shown proceeding the specific manufacturer's PLC error tables. How the hexadecimal error code value is interrupted is slightly different between manufacturers, so it is important to check the explanation at the beginning of each



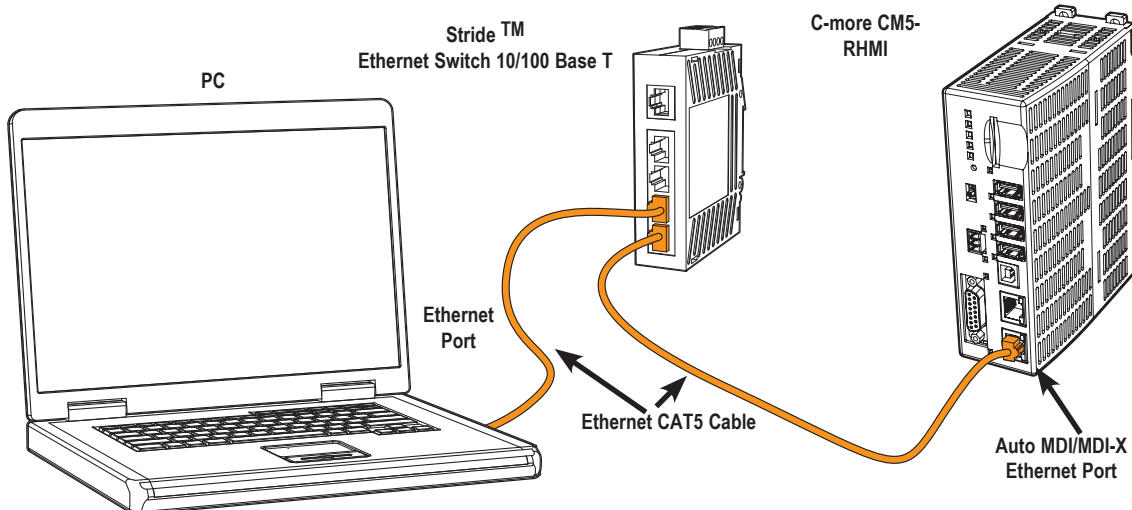
*NOTE: These PLC error codes are provided by the manufacturer of the related PLC and are subject to change by the PLC manufacturer. Please refer to the manufacturers documentation for a more complete and up-to-date list of error codes.*

manufacturer's tables.

All errors are also logged into the panel's **Error** log under the **Information** tab in the panel's **System Setup Screens** and are identified by the error code number. See **Chapter 5: System Setup Screens** for additional details. If you have difficulty determining the cause of the error, please refer to **Chapter 8: Troubleshooting** for some troubleshooting tips or contact our technical support



C-more Error Message



## C-more Touch Panel Error Code Table

The following table includes all of the error codes and error messages that the panel will display if the listed cause is detected. All of these errors involve problems that could result with the panel communicating with the connected PLC. Be aware that not all of the panel errors are used with each type of PLC that can be connected to the panel.

| C-more Touch Panel Error Code Table |   |  |
|-------------------------------------|---|--|
| Error Code                          | Error Message   | Cause  |
| PLC-001                             | PLC Communication Timeout (for single PLC) %Device% PLC Communication Timeout (for multiple PLCs, such as RS-422/485) | A timeout occurred after sending a request to the PLC %Device%. %Device% indicates the device name, such as DEV001.<br>Example error message for multiple PLCs: DEV001 PLC Communication Timeout.    |
| PLC-002                             | NAK received from PLC   | A negative acknowledgement (NAK) control code has been generated during a read/write request.  |
| PLC-003                             | EOT received from PLC   | An End of Transmission (EOT) control code is sent by the PLC in response to a Read/Write/SetBit request..  |
| PLC-004                             | STX is not found  | A Start of Text (STX) control code was not found in the data packet received from the PLC.   |
| PLC-005                             | ETX or ETB is not found   | Neither an End of Text (ETX) nor an End of Transmission Block (ETB) control code was found in the data packet received from the PLC.   |
| PLC-006                             | LRC does not match  | There was an incorrect Longitudinal Redundancy Check (LRC) control code in the communications packet received from the PLC. This is an indication that the data in the packet is corrupted.          |
| PLC-007                             | CRC does not match  | There was an incorrect Cyclic Redundancy Check (CRC) control code in the communications packet received from the PLC. This is an indication that the data in the packet is corrupted.                |
| PLC-008                             | Address does not match  | The address value returned in the data packet from the PLC is incorrect.   |
| PLC-009                             | Different function code received from PLC   | The function code returned in the data packet from the PLC is incorrect.   |
| PLC-010                             | Data size does not match  | There are an incorrect number of bytes found in the data packet returned from the PLC.   |
| PLC-011                             | Invalid value in function code  | There is an invalid value in the function code.  |
| PLC-012                             | Invalid command sent to PLC   | There was an invalid command sent to the PLC that wasn't recognized by the PLC.  |
| PLC-013                             | ENQ received from PLC   | If the data packet does not include a negative acknowledgement (NAK - 0x15 value) in the defined packet field, then an enquiry (ENQ) control code error will be displayed.                           |
| PLC-014                             | Transaction ID does not match   | This error will be displayed if after checking the Transaction ID Bytes in the data packet, there is no match to what was requested.   |
| PLC-015                             | %Device% No device found  | A PLC device designated as %Device% could not be found.  |
| PLC-016                             | Data byte communication error   | 0 byte of data is received   |
| PLC-017                             | Out of address range  | The touch panel requested a file number larger than 255.   |
| PLC-018                             | Panel communication timeout   | The server panel did not respond when using the Panel Pass Through.  |
| PLC-019                             | Found in parity error by hardware   | An error detected in the PLC memory.   |
| PLC-020                             | Can't open serial port  | Cannot open the Serial Port. If this error shows on the panel, it indicates a hardware problem.  |
| PLC-021                             | PLC number does not match   | The PLC number does not match the PLC number configured.   |
| PLC-022                             | Can't reset DCB   | Unable to reset the data communication bit.  |
| PLC-023                             | Cable not connected properly  | Communication cable incorrectly installed.   |
| PLC-024                             | Cannot detect other devices on network  | The panel is not communicating with other devices on the network.  |
| PLC-025                             | Panel not in polling list   |  |
| PLC-026                             | PLC connection timeout  | A timeout occurred after sending a request to the PLC.   |
| PLC-027                             | Memory type incorrect   |  |
| PLC-028                             | PLC failed to respond   | The PLC failed to respond after sending a request to the PLC.  |
| PLC-029                             | MemVer ERR HMI x PLCy   | When connected to a Do-more PLC the PLC memory version must match the <b>C-more</b> project PLC memory version. Make sure that the PLC project does not write into the memory version address.       |
| PLC-495                             | Omron Ethernet Error  | An error code specific to Omron Ethernet with a Value of XXXX has been returned from the PLC. See the explanation for error code PLC-495 proceeding the Omron CS/CJ FINS Ethernet error code tables. |

C-more Touch Panel Error Code Table continued on the next page.

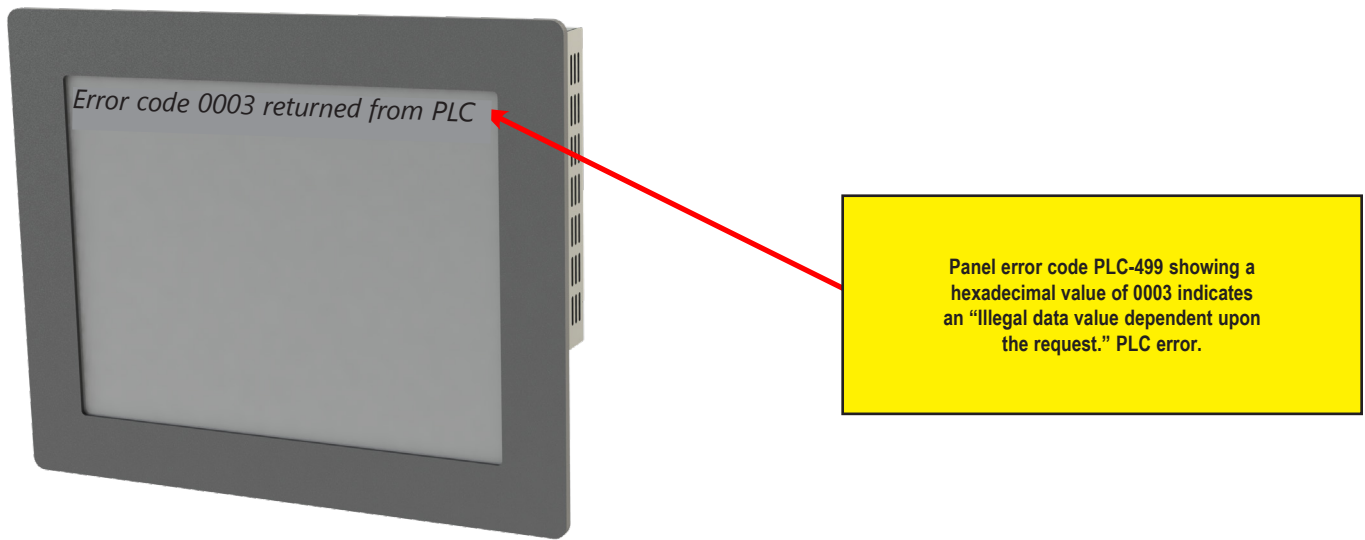
## C-more Touch Panel Error Code Table (cont'd)

| C-more Touch Panel Error Code Table |  |   |
|-------------------------------------|--|---|
| Error Code                          | Error Message                            | Cause   |
| PLC-496                             | Error code 0xaaaaaaaa returned from PLC  | Allen-Bradley EtherNET/IP specific. Encapsulation Error. See the explanation for error code PLC-496 proceeding the Allen-Bradley EtherNet/IP error code tables.   |
| PLC-497                             | Error code 0xaaaaaaaa returned from PLC  | Allen-Bradley EtherNET/IP specific. CIP Error. See the explanation for error code PLC-497 proceeding the Allen-Bradley EtherNet/IP error code tables.   |
| PLC-498                             | Error code 0xaaaaaaaa returned from PLC  | Allen-Bradley EtherNET/IP specific. Service Packet Error. See the explanation for error code PLC-498 proceeding the Allen-Bradley EtherNet/IP error code tables.  |
| PLC-499                             | Error code XXXX returned from PLC        | An error code with a value of XXXX has been returned from the PLC. See the explanation for error code PLC-499 below for Direct LOGIC and proceeding each set of PLC error code tables that use this error code. |
| PLC-500                             | Cannot write to Serial Port              | Data cannot write to the Serial port.<br>Data was sent to the PLC via the Serial Port.<br>If this error shows on the Panel, it indicates a Hardware Problem.  |
| PLC-700                             | Not enough buffer memory                 | There was an error while allocating memory for the read buffer.<br>When this error is displayed, a memory leak may have occurred.   |
| PLC-701                             | Access to inaccessible PLC memory        | Request to inaccessible memory from the HMI layer to the PLC protocol layer. This error is an indication that there is a problem in the HMI layer.  |
| PLC-702                             | Cannot access by different function code | A Read/Write/SetBit request has been sent to an invalid memory area.<br>This error is an indication that there is a problem in the HMI layer.   |
| PLC-703                             | Write request to PLC Read Only Memory    | A PLC Write request was made to the PLC's Read-Only memory area. This error is an indication that there is a problem in the HMI layer or the PLC protocol layer.  |
| PLC-704                             | Bad device-access                        | No device (PLC) exists in the server panel or the device name does not match between the server and client when using the Panel Pass Through.   |
| PLC-705                             | Protocol does not match                  | The protocol for the device does Not match between the server and client when using the panel pass through.   |

## DirectLOGIC – Panel Error Code PLC-499 Explanation

The PLC-499 error code is used to show any errors that are generated by the connected PLC. The PLC-499 error message includes a four-digit hexadecimal value embedded in the message. This value can be looked up in the specific PLC’s error tables to determine the cause of the error. The possible PLC generated error codes for the **DirectLOGIC** communication protocol are represented by a hexadecimal value as shown in the following message example.

### DirectLOGIC Error Code PLC-499 Message Example



## DirectLOGIC K-Sequence Protocol - PLC Error Code Table

The following table lists the errors that can be generated by the DirectLOGIC PLC when using the K-Sequence protocol.

| PLC Error Codes for <i>DirectLOGIC</i> – K-Sequence |   |
|---|---|
| <b>Panel Error Code<br/>PLC-499 Hex Value</b>       | <b>Description</b>                                  |
| 01F8  | Error setting value.                                |
| 020D  | Error in key mode - Set switch on PLC CPU to "Term" |
| 021C  | Password protected.                                 |



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

## DirectLOGIC DirectNET Protocol – PLC Error Codes

Only errors as listed in the Touch Panel Error Code Table shown on page A-3 can occur when using the **DirectLOGIC** DirectNET protocol, there are no PLC generated errors.

## Modbus Protocols Error Code P499 Explanation

The following table lists the errors that can be generated by the Modbus protocols:

### AutomationDirect CLICK

### AutomationDirect DirectLOGIC - Modbus (Koyo)

### Modicon Modbus RTU



**NOTE:** The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.

### Entivity Modbus RTU

| PLC Error Codes for Modbus            |                      |  |
|---------------------------------------|----------------------|--|
| Panel Error Code<br>PLC-499 Hex Value | Name                 | Meaning  |
| 0x0001                                | ILLEGAL FUNCTION     | The function code received in the query is not an allowable action for the server (or slave). This may be because the function code is only applicable to newer devices and was not implemented in the unit selected. It could also indicate that the server (or slave) is in the wrong state to process a request of this type, for example because it is unconfigured and is being asked to return registered values.  |
| 0x0002                                | ILLEGAL DATA ADDRESS | The data address received in the query is not an allowable address for the server (or slave). More specifically, the combination of reference number and transfer length is invalid. For a controller with 100 registers, the PDU addresses the first register as 0, and the last one as 99. If a request is submitted with a starting register address of 96 and a quantity of registers of 4, then the request will successfully operate (address-wise at least) on registers 96, 97, 98, 99. If a request is submitted with a starting register of 96 and a quantity of registers of 5, then the request will fail with Exception code 0x02 "Illegal Data Address" since it attempts to operate on registers 96, 97, 98, 99 and 100, and there is no register with address 100. |
| 0x0003                                | ILLEGAL DATA VALUE   | A value contained in the query data field is not an allowable value for server (or slave). This indicates a fault in the structure of the remainder of a complex request, such as that the implied length is incorrect. It specifically does NOT mean that a data item submitted for storage in a register has a value outside the expectation of the application program, since the Modbus protocol is unaware of the significance of any particular value of any particular register.  |
| 0x0004                                | SLAVE DEVICE FAILURE | An unrecoverable error occurred while the server (or slave) was attempting to perform the requested action.  |

## DirectLOGIC ECOM Protocol – PLC Error Codes

Only errors as listed in the Touch Panel Error Code Table shown previously in this Appendix can occur when using the DirectLOGIC ECOM protocol, there are no PLC generated errors

### Productivity Error Code P499

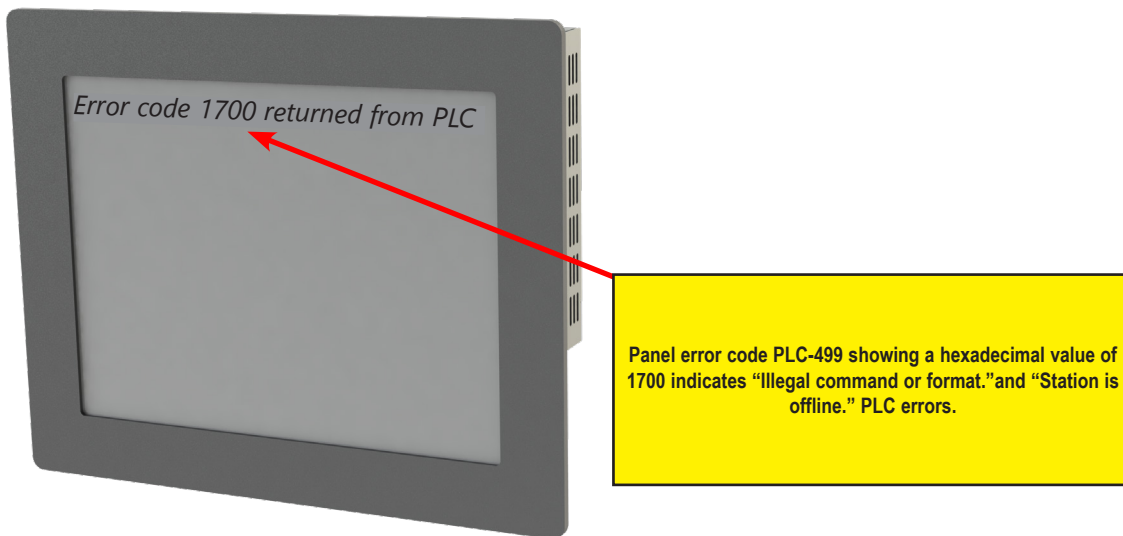


*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Error Codes for Productivity      |   |
|---------------------------------------|---|
| Panel Error Code<br>PLC-499 Hex Value | Meaning   |
| 0x0001                                | The function code received in the query is not an allowable action for the server (or slave). This may be because the function code is only applicable to newer devices and was not implemented in the unit selected. It could also indicate that the server (or slave) is in the wrong state to process a request of this type, for example because it is unconfigured and is being asked to return registered values.   |
| 0x0002                                | Address out of range. Check to make sure that the <b>C-more</b> tag and System ID match the Productivity Programming Software Tag Name and System ID. The project file in the Productivity system and the imported CSV into <b>C-more</b> must be in sync with each other.  |
| 0x0003                                | A value contained in the query data field is not an allowable value for the server (or slave). This indicates a fault in the structure of the remainder of a complex request, such as that the implied length is incorrect. It specifically does NOT mean that a data item submitted for storage in a register has a value outside the expectation of the application program, since the Modbus protocol is unaware of the significance of any particular value of any particular register. |
| 0x0004                                | An unrecoverable error occurred while the server (or slave) was attempting to perform the requested action.   |

# AutomationDirect Do-More Error Codes

| PLC Error Codes for Do-More |                                    |   |
|-----------------------------|------------------------------------|---|
| Error Code                  | Description                        | Resolution  |
| 0x01                        | Unknown Command                    | Should only occur if message has been corrupted or protocol version is mismatched. Check versions and update appropriately. If versions are correct, check cabling, routing and switches for bad packets. |
| 0x02                        | Out of Sessions                    | Too many devices connected to the CPU. Reduce number of devices connected.  |
| 0x03                        | Illegal Operation                  | Occurs when permission level is not sufficient for the operation performed by the panel. Increase the permission level to correct the problem.  |
| 0x04                        | Invalid Session                    | Session number does not match for sending device. Re-establish connection by power cycling or sending updated project.  |
| 0x05                        | Out of Range                       | Invalid address exists. Ensure that address range is expanded and load configuration to the CPU.  |
| 0x06                        | Invalid Argument                   | Occurs when message cannot be parsed correctly. Could occur from noise or faulty wiring.  |
| 0x07                        | Program Update Active              | Wait until program update is complete.  |
| 0x08                        | No Token                           | Occurs when client attempts to update the project without first acquiring the program update token.   |
| 0x09                        | Program Update Inhibited           | Occurs when client attempts to update the project while ST21 is true. This allows the customer to programmatically prevent the project from being updated.  |
| 0x0A                        | System Configuration Update Active | Wait until System Configuration update is complete to continue communications.  |
| 0x0B                        | Invalid Mode                       | Ensure that the switch on the CPU is in Term mode.  |
| 0x0C                        | Mode Change Active                 | Occurs when a PLC mode change is attempted while a mode change is in progress. In some cases it takes several scans for a mode change.  |
| 0x0D                        | Mode Locked                        | Occurs when mode change is attempted and keyswitch is not in Term.  |
| 0x0E                        | Invalid Password                   | Enter Do-more password in Password field of <b>C-more</b> Protocol Manager for this device.   |
| 0x0F                        | Resource Locked                    | Occurs when trying to update a tag that is forced. Force must be removed in order to update the tag.  |
| 0x10                        | Doc Update Active                  | Occurs when someone attempts to access the documentation file while it is being written back to ROM.  |
| 0x11                        | Invalid Driver                     | Occurs when attempting to read driver data from a driver that doesn't exist.  |
| 0x12                        | Invalid Driver Data                | Occurs when attempting to read a driver data type that isn't valid.   |
| 0x13                        | Shared RAM write failed            | Occurs when attempting to read or write to a module's shared RAM and it fails. Usually occurs when the module has gone bad.   |

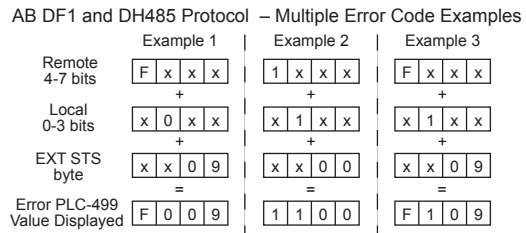
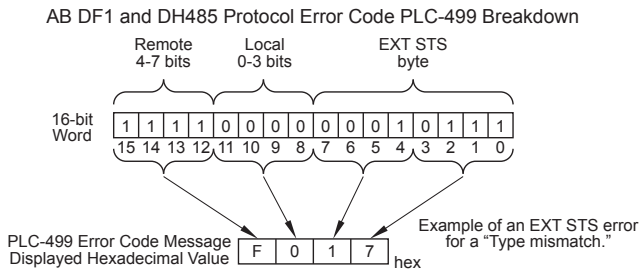




# Allen-Bradley – Panel Error Code PLC-499 Explanation

The PLC-499 error code is used to show any errors that are generated by the connected PLC. The PLC-499 error message includes a four-digit hexadecimal value embedded in the message. This value can be looked up in the specific PLC’s error tables to determine the cause of the error. The possible PLC generated error codes for the Allen-Bradley DF1 communication protocols are represented by a hexadecimal value as shown in the following diagram. Please note that the error code is broken down into three sections. It is possible for more than one type of PLC error to be displayed in this value.

## Allen-Bradley Error Code PLC-499 Message Example



## Allen-Bradley DF1 Protocol – PLC Error Code Tables

The following PLC error code tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the DF1 protocol. DF1 includes full and half duplex communications for the MicroLogix 1000, 1100, 1200, 1400, 1500, SLC 5/03, /04, /05, ControlLogix, CompactLogix and FlexLogix, and full duplex communications for the PLC5.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Errors for Allen-Bradley DF1 Protocol, Local STS Errors (0-3 bits) |   |
|--|---|
| Panel Error Code<br>PLC-499 Hex Value                                  | Description   |
| 0x0  | Success; no error.  |
| 0x1  | DST node is out of buffer space.  |
| 0x2  | Cannot guarantee delivery; link layer.<br>(The remote node specified does not ACK command.) |
| 0x3  | Duplicate token holder detected.  |
| 0x4  | Local port is disconnected.   |
| 0x5  | Application layer timed out waiting for response.   |
| 0x6  | Duplicate node detected.  |
| 0x7  | Station is offline.   |
| 0x8  | Hardware fault.   |

| PLC Errors for Allen-Bradley DF1 Protocol, Remote STS Errors (4-7 bits) |  |
|---|--|
| Panel Error Code<br>PLC-499 Hex Value                                   | Description  |
| 0x0   | Success; no error.   |
| 0x10  | Illegal command or format.   |
| 0x20  | Host has a problem and will not communicate.                               |
| 0x30  | Remote node host is missing, disconnected, or shut down.                   |
| 0x40  | Host could not complete function due to hardware fault.                    |
| 0x50  | Addressing problem or memory protect rungs.                                |
| 0x60  | Function not allowed due to command protection selection.                  |
| 0x70  | Processor is in Program Mode.  |
| 0x80  | Compatibility mode file missing or communication zone problem.             |
| 0x90  | Remote node cannot buffer command.   |
| 0xA0  | Wait ACK (1775 KA buffer full).  |
| 0xB0  | Remote node problem due to download.                                       |
| 0xC0  | Wait ACK (1775 KA buffer full).  |
| 0xD0  | not used   |
| 0xE0  | not used   |
| 0xF0  | Error code in the EXT STS byte. See the error code table on the next page. |

(PLC generated error codes for the Allen-Bradley DF1 protocol continued on the next page.)

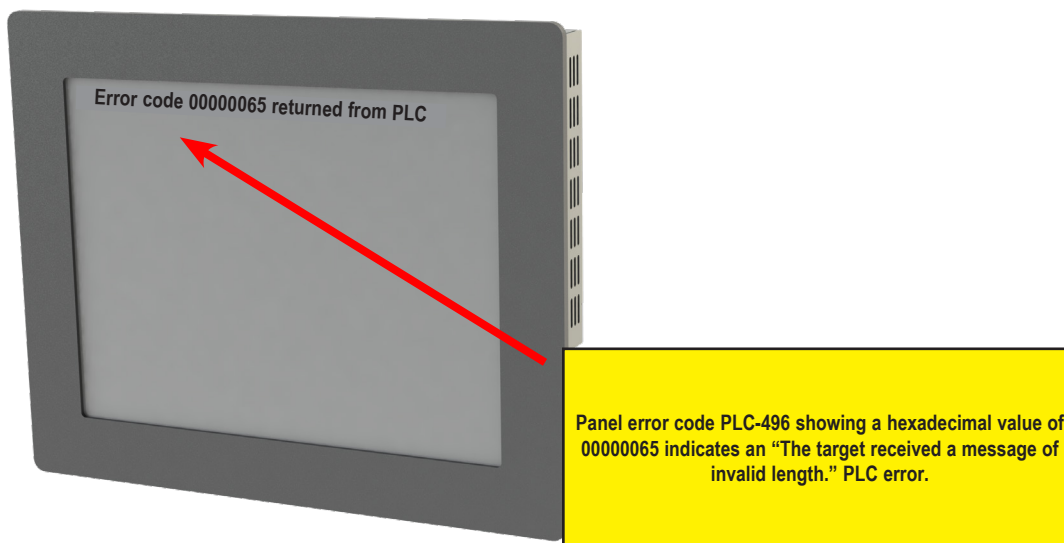
## Allen-Bradley DF1 Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley DF1 Protocol, EXT STS Command Code for F0 Command |  |
|--|--|
| Panel Error Code<br>PLC-499 Hex Value  | Description  |
| 0x0  | not used   |
| 0x1  | A field has an illegal value.  |
| 0x2  | Fewer levels specified in address than minimum for any address.                      |
| 0x3  | More levels specified in address than system supports.                               |
| 0x4  | Symbol not found.  |
| 0x5  | Symbol is of improper format.  |
| 0x6  | Address does not point to something usable.  |
| 0x7  | File is wrong size.  |
| 0x8  | Cannot complete request; situation has changed since start of the command.           |
| 0x9  | Data or file size is too large.  |
| 0xA  | Transaction size plus word address is too large.                                     |
| 0xB  | Access denied; improper privilege.   |
| 0xC  | Condition cannot be generated; resource is not available.                            |
| 0xD  | Condition already exists; resource is readily available.                             |
| 0xE  | Command cannot be executed.  |
| 0xF  | Histogram overflow.  |
| 0x10   | No access.   |
| 0x11   | Illegal data type.   |
| 0x12   | Invalid parameter or invalid data.   |
| 0x13   | Address reference exists to deleted area.  |
| 0x14   | Command execution failure for unknown reason;<br>possible PLC 3 histogram overflow.  |
| 0x15   | Data conversion error.   |
| 0x16   | Scanner not able to communicate with 1771 rack adapter.                              |
| 0x17   | Type mismatch.   |
| 0x18   | 1771 module response was not valid.  |
| 0x19   | Duplicated label.  |
| 0x22   | Remote rack fault.   |
| 0x23   | Timeout.   |
| 0x24   | Unknown error.   |
| 0x1A   | File is open; another node owns it.  |
| 0x1B   | Another node is the program owner.   |
| 0x1C   | Disk File is write protected or otherwise unavailable                                |
| 0x1D   | Disk File is being used by another application. Update not performed (offline only). |
| 0x1E   | Data table element protection violation.   |
| 0x1F   | Temporary internal problem.  |

## Allen-Bradley EtherNet/IP Protocol – Panel Error Code PLC-496, 497 and 498 Explanation

The PLC-496, PLC-497, and PLC-498 error codes are used to show any errors that are generated by the connected PLC. These error messages include an eight-digit hexadecimal value displayed embedded in the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Allen-Bradley EtherNet/IP communication protocol is represented by a hexadecimal value as shown in the following message example.

### Allen-Bradley Error Code PLC-496, 497, 498 Message Example



# Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables

## ControlLogix, CompactLogix, & FlexLogix

The following PLC error code tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the EtherNet/IP protocol. This includes all ControlLogix, CompactLogix and FlexLogix PLCs.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – Encapsulation Errors<br>(Error code 0xaaaaaa returned from the PLC.) |   |
|--|---|
| Panel Error Code<br>PLC-496 Hex Value  | Description   |
| 0x00000001   | The sender issued an invalid or unsupported encapsulation command.  |
| 0x00000002   | Insufficient memory resources in the receiver to handle the command. You can get this error if the 1761-NET-ENI cannot connect to the PLC serially. |
| 0x00000003   | Poorly formed or incorrect data in the data portion of the encapsulation message.   |
| 0x00000004 -<br>0x00000063   | Reserved for legacy (Rockwell Automation).  |
| 0x00000064   | An originator used an invalid session handle when sending an encapsulation message to the target.   |
| 0x00000065   | The target received a message of invalid length.  |
| 0x00000066 -<br>0x00000068   | Reserved for legacy (Rockwell Automation).  |
| 0x00000069   | Unsupported encapsulation protocol revision.  |
| 0x0000006a -<br>0x0000ffff   | Reserved for future expansion.  |

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaaaaaa returned from the PLC.) |   |
|--|---|
| Panel Error Code<br>PLC-497 Hex Value  | Description   |
| 0x010100   | Connection Manager: Connection in Use or Duplicate Forward Open.  |
| 0x010103   | Connection Manager: Transport Class and Trigger combination not supported.                                |
| 0x010106   | Connection Manager: Ownership Conflict.   |
| 0x010107   | Connection Manager: Connection not found at target application.   |
| 0x010108   | Connection Manager: Invalid connection type (problem with type or priority).                              |
| 0x010109   | Connection Manager: Invalid connection size.  |
| 0x010110   | Connection Manager: Device not configured.  |
| 0x010111   | Connection Manager: RPI not supported. Could also be problem with inactivity timeout.                     |
| 0x010113   | Connection Manager: Connection Manager cannot support any more connections.                               |
| 0x010114   | Connection Manager: Either the vendor ID or the Product Code in the key segment did not match the device. |
| 0x010115   | Connection Manager: Product Type in the key segment did not match the device.                             |
| 0x010116   | Connection Manager: Major or minor revision information in the key segment did not match the device.      |
| 0x010117   | Connection Manager: Invalid connection point.   |
| 0x010118   | Connection Manager: Invalid configuration format.   |
| 0x010119   | Connection Manager: Connection request fails since there is no controlling connection currently open.     |
| 0x01011a   | Connection Manager: Target application cannot support any more connections.                               |
| 0x01011b   | Connection Manager: RPI is smaller than the Production Inhibit Time.                                      |
| 0x010203   | Connection Manager: Connection cannot be closed since the connection has timed out.                       |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables

### ControlLogix, CompactLogix, & FlexLogix (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaaaaaa returned from the PLC.) |  |
|--|--|
| Panel Error Code<br>PLC-497 Hex Value  | Description  |
| 0x010204   | Connection Manager: Unconnected Send timed out waiting for a response.   |
| 0x010205   | Connection Manager: Parameter error in Unconnected send service.   |
| 0x010206   | Connection Manager: Message too large for Unconnected message service.   |
| 0x010207   | Connection Manager: Unconnected acknowledge without reply.   |
| 0x010301   | Connection Manager: No buffer memory available.  |
| 0x010302   | Connection Manager: Network Bandwidth not available for data.  |
| 0x010303   | Connection Manager: No Tag filters available.  |
| 0x010304   | Connection Manager: Not configured to send real-time data.   |
| 0x010311   | Connection Manager: Port specified in Port segment not available.  |
| 0x010312   | Connection Manager: Link address specified in port segment not available.  |
| 0x010315   | Connection Manager: invalid segment type or segment value in path.   |
| 0x010316   | Connection Manager: Path and Connection not equal in close.  |
| 0x010317   | Connection Manager: Ether Segment not present or Encoded Value in Network Segment is invalid.  |
| 0x010318   | Connection Manager: Link address to self invalid.  |
| 0x010319   | Connection Manager: Resources on Secondary unavailable.  |
| 0x01031a   | Connection Manager: Connection already established.  |
| 0x01031b   | Connection Manager: Direct connection already established.   |
| 0x01031c   | Connection Manager: Miscellaneous.   |
| 0x01031d   | Connection Manager: Redundant connection mismatch.   |
| 0x01031e   | Connection Manager: No more consumer resources available in the producing module.  |
| 0x01031f   | Connection Manager: No connection resources exist for target path.   |
| 0x010320 -<br>0x0107ff   | Connection Manager: Vendor specific.   |
| 0x020000   | Resource unavailable: Connection Manager resources are unavailable to handle service request.  |
| 0x030000   | Invalid parameter value.   |
| 0x040000   | Path segment error: The path segment identifier or the segment syntax was not understood by the processing node.   |
| 0x050000   | Path destination unknown: The path is referencing an object class, instance or structure element that is not known or is not contained in the processing node. |
| 0x060000   | Partial transfer: Only part of the expected data was transferred.  |
| 0x070000   | Connection lost: The messaging connection was lost.  |
| 0x080000   | Service not supported: The requested service was not implemented or was not defined for this Object Class/Instance.  |
| 0x090000   | Invalid attribute value: Invalid attribute data detected.  |
| 0x0a0000   | Attribute list error: An attribute in the Get_Attribute_List or Set_Attribute_List response has a non-zero status.   |
| 0x0b0000   | Already in requested mode/state: The object is already in the mode/state being requested by the service.   |
| 0x0c0000   | Object state conflict: The object cannot perform the requested service in its current mode/state.  |
| 0x0d0000   | Object already exists: The requested instance of object to be created already exists.  |
| 0x0e0000   | Attribute not settable: A request to modify non-modifiable attribute was received.   |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol for continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables ControlLogix, CompactLogix, & FlexLogix (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaaaaaa returned from the PLC.) |   |
|--|---|
| Panel Error Code<br>PLC-497 Hex Value  | Description   |
| 0x0f0000   | Privilege violation: A permission/privilege check failed.   |
| 0x100000   | Device state conflict: The device's current mode/state prohibits the execution of the requested service.  |
| 0x110000   | Reply data too large: The data to be transmitted in the response buffer is larger than the allocated response buffer.   |
| 0x120000   | Fragmentation of a primitive value: The service specified an operation that is going to fragment a primitive data value. For example, trying to send a 2 byte value to a REAL data type (4 byte). |
| 0x130000   | Not enough data: The service did not supply enough data to perform the specified operation.   |
| 0x140000   | Attribute not supported: The attribute specified in the request is not supported.   |
| 0x150000   | Too much data: The service supplied more data than was expected.  |
| 0x160000   | Object does not exist: The object specified does not exist in the device.   |
| 0x170000   | Service fragmentation sequence not in progress: The fragmentation sequence for this service is not currently active for this data.  |
| 0x180000   | No stored attribute data: The attribute data of this object was no saved prior to the requested service.  |
| 0x190000   | Store operation failure: The attribute data of this object was not saved due to a failure during the attempt.   |
| 0x1a0000   | Routing failure, request packet too large: The service request packet was too large for transmission on a network in the path to the destination.   |
| 0x1b0000   | Routing failure, response packet too large: The service response packet was too large for transmission on a network in the path from the destination.   |
| 0x1c0000   | Missing attribute list entry data: The service did not supply an attribute in a list of attributes that was needed by the service to perform the requested behavior.                              |
| 0x1d0000   | Invalid attribute value list: The service is returning the list of attributes supplied with status information for those attributes that were invalid.  |
| 0x1e0000   | Embedded service error: See Service Packet error list (PLC-498 Error codes) below:  |
| 0x1f0000   | Vendor specific error: A vendor specific error has been encountered. This occurs when none of the specified errors relate to the error in the device.   |
| 0x200000   | Invalid parameter: A parameter associated with the request was invalid. This code is used when a parameter does not meet the requirements defined in an Application Object specification.         |
| 0x210000   | Write-once value or medium already written: An attempt was made to write to a write-once-medium that has already been written or to modify a value that cannot be change once established.        |
| 0x220000   | Invalid Reply Received: An invalid reply is received (example: service code sent doesn't match service code received.).   |
| 0x230000   | Reserved by CIP for future extensions.  |
| 0x240000   | Reserved by CIP for future extensions.  |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol for continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables

### ControlLogix, CompactLogix, & FlexLogix (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – Service Packet Errors<br>(Error code 0xaaaaaa returned from the PLC.) |   |
|---|---|
| Panel Error Code<br>PLC-498 Hex Value   | Description   |
| 0x250000  | Key failure in path: The key segment was included as the first segment in the path does not match the destination module. The object specific status shall indicate which part of the key check failed.   |
| 0x260000  | Path Size Invalid: The size of the path which was sent with the Service Request is either not large enough to allow the Request to be routed to an object or too much routing data was included.  |
| 0x270000  | Unexpected attribute in list: An attempt was made to set an attribute that is not able to be set at this time.  |
| 0x280000  | Invalid Member ID: The Member ID specified in the request does not exist in the specified Class/Instance/Attribute.   |
| 0x290000  | Member not settable: A request to modify a non-modifiable member was received.  |
| 0x2a0000  | Group 2 only server general failure: This error code may only be reported by DeviceNet group 2 only servers with 4K or less code space and only in place of Service not supported, Attribute not supported and Attribute not settable.          |
| 0x2b0000 -<br>0xcf0000  | Reserved by CIP for future extensions.  |
| 0xd00000 -<br>0xff0000  | Reserved for Object Class and service errors: This range of error codes is to be used to indicate Object Class specific errors. Use of this range should only be used when errors in this table don't accurately reflect the error encountered. |
| 0x040000  | This general status codes that the tag name could not be deciphered. This could mean that the tag name was entered incorrectly or does not exist in the PLC.  |
| 0x050000  | The particular item referenced (usually instance) could not be found.   |
| 0x060000  | The amount of data requested would not fit into the response buffer. Partial data transfer has occurred.  |
| 0x0a0000  | An error has occurred trying to process one of the attributes.  |
| 0x130000  | Not enough command data/parameters were supplied in the command to execute the service requested.   |
| 0x1c0000  | An insufficient number of attributes were provided compared to the attribute count.   |
| 0x260000  | The tag name length specified did not match what was in the message.  |
| 0xff0521  | You have tried to access beyond the end of the data object.   |
| 0xff0721  | The abbreviated type does not match the data type of the data object.   |
| 0xff0421  | The beginning offset was beyond the end of the template.  |



# Allen-Bradley – Micro800 Serial and EtherNet/IP Tag Based PLC Error Code Tables

The following PLC error code tables cover possible errors that are detected by the panel from Allen-Bradley Micro800 PLCs using the tag based serial or EtherNet/IP protocols.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Errors for Allen-Bradley EtherNet/IP Protocol –Encapsulation Errors<br>(Error code 0xaaaaaa returned from the PLC) |   |
|--|---|
| Panel Error Code<br>PLC-496 Hex Value  | Description   |
| 0x00000001   | The sender issued an invalid or unsupported encapsulation command.  |
| 0x00000002   | Insufficient memory resources in the receiver to handle the command. You can get this error if the 1761-NET-ENI cannot connect to the PLC serially. |
| 0x00000003   | Poorly formed or incorrect data in the data portion of the encapsulation message.   |
| 0x00000004 -<br>0x00000063   | Reserved for legacy (Rockwell Automation).  |
| 0x00000064   | An originator used an invalid session handle when sending an encapsulation message to the target.   |
| 0x00000065   | The target received a message of invalid length.  |
| 0x00000066 -<br>0x00000068   | Reserved for legacy (Rockwell Automation).  |
| 0x00000069   | Unsupported encapsulation protocol revision.  |
| 0x0000006a -<br>0x0000ffff   | Reserved for future expansion.  |

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaaaaaa returned from the PLC) |   |
|---|---|
| Panel Error Code<br>PLC-497 Hex Value   | Description   |
| 0x010100  | Connection Manager: Connection in Use or Duplicate Forward Open.  |
| 0x010103  | Connection Manager: Transport Class and Trigger combination not supported.                                |
| 0x010106  | Connection Manager: Ownership Conflict.   |
| 0x010107  | Connection Manager: Connection not found at target application.   |
| 0x010108  | Connection Manager: Invalid connection type (problem with type or priority).                              |
| 0x010109  | Connection Manager: Invalid connection size.  |
| 0x010110  | Connection Manager: Device not configured.  |
| 0x010111  | Connection Manager: RPI not supported. Could also be problem with inactivity timeout.                     |
| 0x010113  | Connection Manager: Connection Manager cannot support any more connections.                               |
| 0x010114  | Connection Manager: Either the vendor ID or the Product Code in the key segment did not match the device. |
| 0x010115  | Connection Manager: Product Type in the key segment did not match the device.                             |
| 0x010116  | Connection Manager: Major or minor revision information in the key segment did not match the device.      |

(PLC generated error codes for the Allen-Bradley Micro800 Serial and EtherNet/IP Tag Based PLC continued on the next page)

## Allen-Bradley – Micro800 Serial and EtherNet/IP Tag Based PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaaaaaa returned from the PLC) |  |
|---|--|
| Panel Error Code<br>PLC-497 Hex Value   | Description  |
| 0x010117  | Connection Manager: Invalid connection point.  |
| 0x010118  | Connection Manager: Invalid configuration format.  |
| 0x010119  | Connection Manager: Connection request fails since there is no controlling connection currently open.  |
| 0x01011a  | Connection Manager: Target application cannot support any more connections.  |
| 0x01011b  | Connection Manager: RPI is smaller than the Production Inhibit Time.   |
| 0x010203  | Connection Manager: Connection cannot be closed since the connection has timed out.  |
| 0x010204  | Connection Manager: Unconnected Send timed out waiting for a response.   |
| 0x010205  | Connection Manager: Parameter error in Unconnected Send service.   |
| 0x010206  | Connection Manager: Message too large for Unconnected message service.   |
| 0x010207  | Connection Manager: Unconnected acknowledge without reply.   |
| 0x010301  | Connection Manager: No buffer memory available.  |
| 0x010302  | Connection Manager: Network Bandwidth not available for data.  |
| 0x010303  | Connection Manager: No Tag filters available.  |
| 0x010304  | Connection Manager: Not configured to send real-time data.   |
| 0x010311  | Connection Manager: Port specified in Port segment not available.  |
| 0x010312  | Connection Manager: Link address specified in port segment not available.  |
| 0x010315  | Connection Manager: Invalid segment type or segment value in path.   |
| 0x010316  | Connection Manager: Path and Connection not equal in close.  |
| 0x010317  | Connection Manager: Ether Segment not present or Encoded Value in Network Segment is invalid.  |
| 0x010318  | Connection Manager: Link address to self invalid.  |
| 0x010319  | Connection Manager: Resources on Secondary unavailable.  |
| 0x01031a  | Connection Manager: Connection already established.  |
| 0x01031b  | Connection Manager: Direct connection already established.   |
| 0x01031c  | Connection Manager: Miscellaneous.   |
| 0x01031d  | Connection Manager: Redundant connection mismatch.   |
| 0x01031e  | Connection Manager: No more consumer resources available in the producing module.  |
| 0x01031f  | Connection Manager: No connection resources exist for target path.   |
| 0x010320 - 0x0107ff   | Connection Manager: Vendor specific.   |
| 0x020000  | Resource unavailable: Connection Manager resources are unavailable to handle service request.  |
| 0x030000  | Invalid parameter value.   |
| 0x040000  | Path segment error: The path segment identifier or the segment syntax was not understood by the processing node.   |
| 0x050000  | Path destination unknown: The path is referencing an object class, instance or structure element that is not known or is not contained in the processing node. |
| 0x060000  | Partial transfer: Only part of the expected data was transferred.  |
| 0x070000  | Connection lost: The messaging connection was lost.  |
| 0x080000  | Service not supported: The requested service was not implemented or was not defined for this Object Class/Instance.  |
| 0x090000  | Invalid attribute value: Invalid attribute data detected.  |
| 0x0a0000  | Attribute list error: An attribute in the Get_Attribute_List or Set_Attribute_List response has a non-zero status.   |
| 0x0b0000  | Already in requested mode/state: The object is already in the mode/state being requested by the service.   |
| 0x0c0000  | Object state conflict: The object cannot perform the requested service in its current mode/state.  |

(PLC generated error codes for the Allen-Bradley Micro800 Serial and EtherNet/IP Tag Based PLC continued on the next page)

## Allen-Bradley – Micro800 Serial and EtherNet/IP Tag Based PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xa00000 returned from the PLC) |  |
|---|--|
| Panel Error Code<br>PLC-497 Hex Value   | Description  |
| 0x0d0000  | Object already exists: The requested instance of object to be created already exists.  |
| 0x0e0000  | Attribute not settable: A request to modify non-modifiable attribute was received.   |
| 0x0f0000  | Privilege violation: A permission/privilege check failed.  |
| 0x100000  | Device state conflict: The device's current mode/state prohibits the execution of the requested service.   |
| 0x110000  | Reply data too large: The data to be transmitted in the response buffer is larger than the allocated response buffer.  |
| 0x120000  | Fragmentation of a primitive value: The service specified an operation that is going to fragment a primitive data value - for example, trying to send a 2 byte value to a REAL data type (4 byte).                                     |
| 0x130000  | Not enough data: The service did not supply enough data to perform the specified operation.  |
| 0x140000  | Attribute not supported: The attribute specified in the request is not supported.  |
| 0x150000  | Too much data: The service supplied more data than was expected.   |
| 0x160000  | Object does not exist: The object specified does not exist in the device.  |
| 0x170000  | Service fragmentation sequence not in progress: The fragmentation sequence for this service is not currently active for this data.   |
| 0x180000  | No stored attribute data: The attribute data of this object was no saved prior to the requested service.   |
| 0x190000  | Store operation failure: The attribute data of this object was not saved due to a failure during the attempt.  |
| 0x1a0000  | Routing failure, request packet too large: The service request packet was too large for transmission on a network in the path to the destination.  |
| 0x1b0000  | Routing failure, response packet too large: The service response packet was too large for transmission on a network in the path from the destination.  |
| 0x1c0000  | Missing attribute list entry data: The service did not supply an attribute in a list of attributes that was needed by the service to perform the requested behavior.   |
| 0x1d0000  | Invalid attribute value list: The service is returning the list of attributes supplied with status information for those attributes that were invalid.   |
| 0x1e0000  | Embedded service error: See Service Packet error list (PLC-498 Error codes) later in this appendix   |
| 0x1f0000  | Vendor specific error: A vendor specific error has been encountered. This occurs when none of the specified errors relate to the error in the device.  |
| 0x200000  | Invalid parameter: A parameter associated with the request was invalid. This code is used when a parameter does meet the requirements defined in an Application Object specification.  |
| 0x210000  | Write-once value or medium already written: An attempt was made to write to a write-once-medium that has already been written or to modify a value that cannot be change once established.   |
| 0x220000  | Invalid Reply Received: An invalid reply is received (example: service code sent doesn't match service code received).   |
| 0x230000  | Reserved by CIP for future extensions.   |
| 0x240000  | Reserved by CIP for future extensions.   |
| 0x250000  | Key failure in path: The key segment was included as the first segment in the path does not match the destination module. The object specific status shall indicate which part of the key check failed.                                |
| 0x260000  | Path Size Invalid: The size of the path which was sent with the Service Request is either not large enough to allow the Request to be routed to an object or too much routing data was included.                                       |
| 0x270000  | Unexpected attribute in list: An attempt was made to set an attribute that is not able to be set at this time.   |
| 0x280000  | Invalid Member ID: The Member ID specified in the request does not exist in the specified Class/Instance/Attribute.  |
| 0x290000  | Member not settable: A request to modify a non-modifiable member was received.   |
| 0x2a0000  | Group 2 only server general failure: This error code may only be reported by DeviceNet group 2 only servers with 4K or less code space and only in place of Service not supported, Attribute not supported and Attribute not settable. |

(PLC generated error codes for the Allen-Bradley Micro800 Serial and EtherNet/IP Tag Based PLC continued on the next page)

## Allen-Bradley – Micro800 Serial and EtherNet/IP Tag Based PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – Service Packet Errors<br>(Error code 0xaaaaaa returned from the PLC) |   |
|--|---|
| Panel Error Code<br>PLC-498 Hex Value  | Description   |
| 0x2b0000 -<br>0xcf0000   | Reserved by CIP for future extensions.  |
| 0xd00000 -<br>0xff0000   | Reserved for Object Class and service errors: This range of error codes is to be used to indicate Object Class specific errors. Use of this range should only be used when errors in this table don't accurately reflect the error encountered. |
| 0x040000   | This general status codes that the tag name could not be deciphered. This could mean that the tag name was entered incorrectly or does not exist in the PLC.  |
| 0x050000   | The particular item referenced (usually instance) could not be found.   |
| 0x060000   | The amount of data requested would not fit into the response buffer. Partial data transfer has occurred.  |
| 0x0a0000   | An error has occurred trying to process one of the attributes.  |
| 0x130000   | Not enough command data/parameters were supplied in the command to execute the service requested.   |
| 0x1c0000   | An insufficient number of attributes were provided compared to the attribute count.   |
| 0x260000   | The tag name length specified did not match what was in the message.  |
| 0xff0521   | You have tried to access beyond the end of the data object.   |
| 0xff0721   | The abbreviated type does not match the data type of the data object.   |
| 0xff0421   | The beginning offset was beyond the end of the template.  |

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables

The following PLC error code tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the EtherNet/IP protocol. This includes MicroLogix 1100, 1400 & SLC 5/05, both using their native Ethernet port, and MicroLogix 1000, 1100, 1200, 1400, 1500, SLC 5/03, 5/04 and 5/05 using an Allen-Bradly ENI Adapter.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

### PLC Errors for Allen-Bradley EtherNet/IP Protocol –Encapsulation Errors (Error code 0xaaaaaa returned from the PLC.)

| Panel Error Code<br>PLC-496 Hex Value | Description   |
|---------------------------------------|---|
| 0x00000001                            | The sender issued an invalid or unsupported encapsulation command.  |
| 0x00000002                            | Insufficient memory resources in the receiver to handle the command. You can get this error if the 1761-NET-ENI cannot connect to the PLC serially. |
| 0x00000003                            | Poorly formed or incorrect data in the data portion of the encapsulation message.   |
| 0x00000004 -<br>0x00000063            | Reserved for legacy (Rockwell Automation).  |
| 0x00000064                            | An originator used an invalid session handle when sending an encapsulation message to the target.   |
| 0x00000065                            | The target received a message of invalid length.  |
| 0x00000066 -<br>0x00000068            | Reserved for legacy (Rockwell Automation).  |
| 0x00000069                            | Unsupported encapsulation protocol revision.  |
| 0x0000006a -<br>0x0000ffff            | Reserved for future expansion.  |

### PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors (Error code 0xaabbbb returned from the PLC.)

| Panel Error Code<br>PLC-497 Hex Value | Description   |
|---------------------------------------|---|
| 0x010100                              | Connection Manager: Connection in Use or Duplicate Forward Open.  |
| 0x010103                              | Connection Manager: Transport Class and Trigger combination not supported.                                |
| 0x010106                              | Connection Manager: Ownership Conflict.   |
| 0x010107                              | Connection Manager: Connection not found at target application.   |
| 0x010108                              | Connection Manager: Invalid connection type (problem with type or priority).                              |
| 0x010109                              | Connection Manager: Invalid connection size.  |
| 0x010110                              | Connection Manager: Device not configured.  |
| 0x010111                              | Connection Manager: RPI not supported. Could also be problem with inactivity timeout.                     |
| 0x010113                              | Connection Manager: Connection Manager cannot support any more connections.                               |
| 0x010114                              | Connection Manager: Either the vendor ID or the Product Code in the key segment did not match the device. |
| 0x010115                              | Connection Manager: Product Type in the key segment did not match the device.                             |
| 0x010116                              | Connection Manager: Major or minor revision information in the key segment did not match the device.      |
| 0x010117                              | Connection Manager: Invalid connection point.   |
| 0x010118                              | Connection Manager: Invalid configuration format.   |
| 0x010119                              | Connection Manager: Connection request fails since there is no controlling connection currently open.     |
| 0x01011a                              | Connection Manager: Target application cannot support any more connections.                               |
| 0x01011b                              | Connection Manager: RPI is smaller than the Production Inhibit Time.                                      |
| 0x010203                              | Connection Manager: Connection cannot be closed since the connection has timed out.                       |
| 0x010204                              | Connection Manager: Unconnected Send timed out waiting for a response.                                    |
| 0x010205                              | Connection Manager: Parameter error in Unconnected send service.  |

(PLC error code tables continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables(cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaabbbb returned from the PLC.) |   |
|--|---|
| Panel Error Code<br>PLC-497 Hex Value  | Description   |
| 0x010206   | Connection Manager: Message too large for Unconnected message service.  |
| 0x010207   | Connection Manager: Unconnected acknowledge without reply.  |
| 0x010301   | Connection Manager: No buffer memory available.   |
| 0x010302   | Connection Manager: Network Bandwidth not available for data.   |
| 0x010303   | Connection Manager: No Tag filters available.   |
| 0x010304   | Connection Manager: Not configured to send real-time data.  |
| 0x010311   | Connection Manager: Port specified in Port segment not available.   |
| 0x010312   | Connection Manager: Link address specified in port segment not available.   |
| 0x010315   | Connection Manager: invalid segment type or segment value in path.  |
| 0x010316   | Connection Manager: Path and Connection not equal in close.   |
| 0x010317   | Connection Manager: Ether Segment not present or Encoded Value in Network Segment is invalid.   |
| 0x010318   | Connection Manager: Link address to self invalid.   |
| 0x010319   | Connection Manager: Resources on Secondary unavailable.   |
| 0x01031a   | Connection Manager: Connection already established.   |
| 0x01031b   | Connection Manager: Direct connection already established.  |
| 0x01031c   | Connection Manager: Miscellaneous.  |
| 0x01031d   | Connection Manager: Redundant connection mismatch.  |
| 0x01031e   | Connection Manager: No more consumer resources available in the producing module.   |
| 0x01031f   | Connection Manager: No connection resources exist for target path.  |
| 0x010320 -<br>0x0107ff   | Connection Manager: Vendor specific.  |
| 0x020000   | Resource unavailable: Connection Manager resources are unavailable to handle service request.   |
| 0x030000   | Invalid parameter value.  |
| 0x040000   | Path segment error: The path segment identifier or the segment syntax was not understood by the processing node.  |
| 0x050000   | Path destination unknown: The path is referencing an object class, instance or structure element that is not known or is not contained in the processing node.                                    |
| 0x060000   | Partial transfer: Only part of the expected data was transferred.   |
| 0x070000   | Connection lost: The messaging connection was lost.   |
| 0x080000   | Service not supported: The requested service was not implemented or was not defined for this Object Class/Instance.   |
| 0x090000   | Invalid attribute value: Invalid attribute data detected.   |
| 0x0a0000   | Attribute list error: An attribute in the Get_Attribute_List or Set_Attribute_List response has a non-zero status.  |
| 0x0b0000   | Already in requested mode/state: The object is already in the mode/state being requested by the service.  |
| 0x0c0000   | Object state conflict: The object cannot perform the requested service in its current mode/state.   |
| 0x0d0000   | Object already exists: The requested instance of object to be created already exists.   |
| 0x0e0000   | Attribute not settable: A request to modify non-modifiable attribute was received.  |
| 0x0f0000   | Privilege violation: A permission/privilege check failed.   |
| 0x100000   | Device state conflict: The device's current mode/state prohibits the execution of the requested service.  |
| 0x110000   | Reply data too large: The data to be transmitted in the response buffer is larger than the allocated response buffer.   |
| 0x120000   | Fragmentation of a primitive value: The service specified an operation that is going to fragment a primitive data value. For example, trying to send a 2 byte value to a REAL data type (4 byte). |
| 0x130000   | Not enough data: The service did not supply enough data to perform the specified operation.   |
| 0x140000   | Attribute not supported: The attribute specified in the request is not supported.   |
| 0x150000   | Too much data: The service supplied more data than was expected.  |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – CIP Errors<br>(Error code 0xaabbbb returned from the PLC.) |   |
|--|---|
| Panel Error Code<br>PLC-497 Hex Value  | Description   |
| 0x160000   | Object does not exist: The object specified does not exist in the device.   |
| 0x170000   | Service fragmentation sequence not in progress: The fragmentation sequence for this service is not currently active for this data.  |
| 0x180000   | No stored attribute data: The attribute data of this object was no saved prior to the requested service.  |
| 0x190000   | Store operation failure: The attribute data of this object was not saved due to a failure during the attempt.   |
| 0x1a0000   | Routing failure, request packet too large: The service request packet was too large for transmission on a network in the path to the destination.   |
| 0x1b0000   | Routing failure, response packet too large: The service response packet was too large for transmission on a network in the path from the destination.   |
| 0x1c0000   | Missing attribute list entry data: The service did not supply an attribute in a list of attributes that was needed by the service to perform the requested behavior.  |
| 0x1d0000   | Invalid attribute value list: The service is returning the list of attributes supplied with status information for those attributes that were invalid.  |
| 0x1e0000   | Embedded service error: See Service Packet error list (PLC-498 Error codes) below:  |
| 0x1f0000   | Vendor specific error: A vendor specific error has been encountered. This occurs when none of the specified errors relate to the error in the device.   |
| 0x200000   | Invalid parameter: A parameter associated with the request was invalid. This code is used when a parameter does meet the requirements defined in an Application Object specification.   |
| 0x210000   | Write-once value or medium already written: An attempt was made to write to a write-once-medium that has already been written or to modify a value that cannot be change once established.  |
| 0x220000   | Invalid Reply Received: An invalid reply is received (example: service code sent doesn't match service code received.).   |
| 0x230000   | Reserved by CIP for future extensions.  |
| 0x240000   | Reserved by CIP for future extensions.  |
| 0x250000   | Key failure in path: The key segment was included as the first segment in the path does not match the destination module. The object specific status shall indicate which part of the key check failed.   |
| 0x260000   | Path Size Invalid: The size of the path which was sent with the Service Request is either not large enough to allow the Request to be routed to an object or too much routing data was included.  |
| 0x270000   | Unexpected attribute in list: An attempt was made to set an attribute that is not able to be set at this time.  |
| 0x280000   | Invalid Member ID: The Member ID specified in the request does not exist in the specified Class/Instance/Attribute.   |
| 0x290000   | Member not settable: A request to modify a non-modifiable member was received.  |
| 0x2a0000   | Group 2 only server general failure: This error code may only be reported by DeviceNet group 2 only servers with 4K or less code space and only in place of Service not supported, Attribute not supported and Attribute not settable.          |
| 0x2b0000 -<br>0xcf0000   | Reserved by CIP for future extensions.  |
| 0xd00000 -<br>0xff0000   | Reserved for Object Class and service errors: This range of error codes is to be used to indicate Object Class specific errors. Use of this range should only be used when errors in this table don't accurately reflect the error encountered. |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol continued on the next page.)

## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – Service Packet Errors<br>(Error code 0xaabbbb returned from the PLC.) |   |
|---|---|
| Panel Error Code<br>PLC-498 Hex Value   | Description   |
| 0x010000  | DST Node is out of buffer space.  |
| 0x020000  | Cannot guarantee delivery; link layer (The remote node specified does not ACK command).   |
| 0x030000  | Duplicate token holder detected.  |
| 0x040000  | Local port is disconnected.   |
| 0x050000  | Application layer timed out waiting for response.   |
| 0x060000  | Duplicate node detected.  |
| 0x070000  | Station is offline.   |
| 0x080000  | Hardware fault.   |
| 0x100000  | Illegal command or format. Typical error received from PLC when addressed requested to the PLC does not exist. Usually occurs if memory map has not been expanded in PLC to the range requested from panel. |
| 0x200000  | Host has a problem and will not communicate.  |
| 0x300000  | Remote node host is missing, disconnected, or shut down.  |
| 0x400000  | Host could not complete function due to hardware fault.   |
| 0x500000  | Addressing problem or memory protected rungs.   |
| 0x600000  | Function not allowed due to command protection selection.   |
| 0x700000  | Processor is in Program Mode.   |
| 0x800000  | Compatibility mode file missing or communication zone problem.  |
| 0x900000  | Remote node cannot buffer command.  |
| 0xA00000  | Wait ACK (1775 KA buffer full).   |
| 0xB00000  | Not used.   |
| 0xC00000  | Not used.   |
| 0xD00000  | Error code in the EXT STS byte. See the error code table below.   |
| 0xE00000  | Fewer levels specified in address than minimum for any address.   |
| 0xF00300  | More levels specified in address than system supports.  |
| 0xF00400  | Symbol not found.   |
| 0xF00500  | Symbol is of improper format.   |
| 0xF00600  | Address does not point to something usable.   |
| 0xF00700  | File is wrong size.   |
| 0xF00800  | Cannot complete request, situation has changed since start of the command.  |
| 0xF00900  | Data or file size is too large.   |
| 0xF00900  | Transaction size plus word address is too large.  |
| 0xF00B00  | Access denied; improper privilege. This will occur if data file is set to constant or protected.  |
| 0xF00C00  | Condition cannot be generated; resource is not available.   |
| 0xF00D00  | Condition already exists; resource is readily available.  |
| 0xF00E00  | Command cannot be executed.   |
| 0xF00F00  | Histogram overflow.   |
| 0xF01000  | No access.  |
| 0xF01100  | Illegal data type.  |
| 0xF01200  | Invalid parameter or invalid data.  |
| 0xF01300  | Address reference exists to deleted area.   |
| 0xF01400  | Command execution failure for unknown reason; possible histogram overflow.  |
| 0xF01500  | Data conversion error.  |

(PLC generated error codes for the Allen-Bradley EtherNet/IP protocol continued on the next page.)



## Allen-Bradley – EtherNet/IP Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for Allen-Bradley EtherNet/IP Protocol – Service Packet Errors<br>(Error code 0xaabbbb returned from the PLC.) |   |
|---|---|
| <b>Panel Error Code<br/>PLC-498 Hex Value</b>   | <b>Description</b>                                      |
| 0xF01600  | Scanner not able to communicate with 1771 rack adapter. |
| 0xF01700  | Type mismatch.  |
| 0xF01800  | 1771 module response was not valid.                     |
| 0xF01900  | Duplicated label.                                       |
| 0xF02200  | Remote rack fault.                                      |
| 0xF02300  | Timeout.  |
| 0xF02400  | Unknown error.  |
| 0xF01A00  | File is open; another node owns it.                     |
| 0xF01B00  | Another node is the program owner.                      |
| 0xF01C00  | Reserved.   |
| 0xF01D00  | Reserved.   |
| 0xF01E00  | Data table element protection violation.                |
| 0xF01F00  | Temporary internal problem.                             |

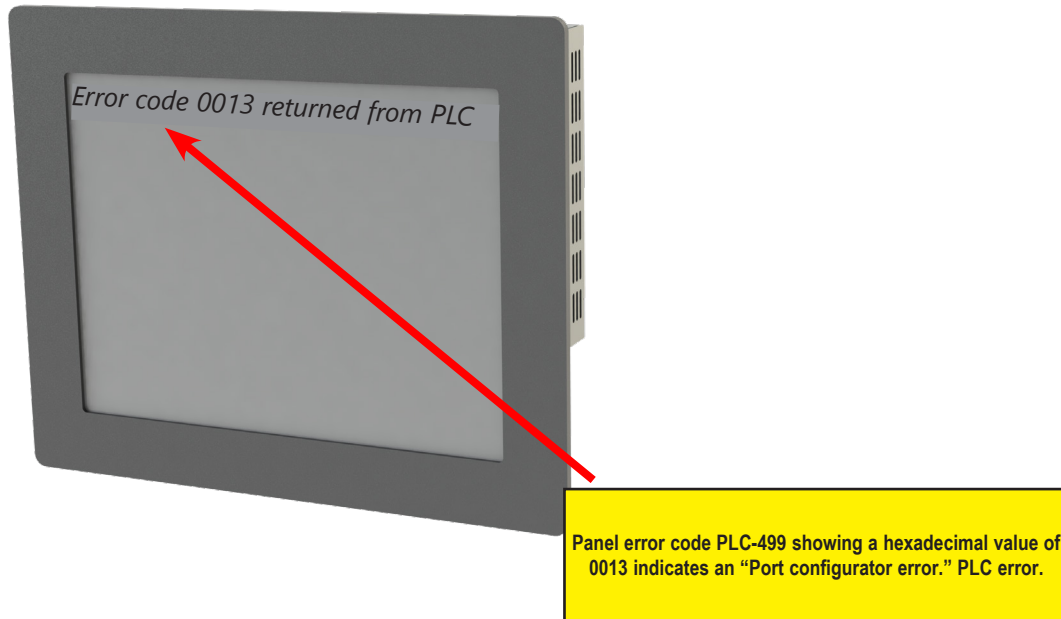
### Generic EtherNet IP Protocol – PLC Error Codes

Only errors as listed in the Touch Panel Error Code Table shown previously in this Appendix can occur when using the Generic Ethernet IP protocol, there are no PLC generated errors.

## GE 90-30 – Panel Error Code PLC-499 Explanation

The PLC-499 error code is used to show any errors that are generated by the connected PLC. The PLC-499 error message includes a four-digit hexadecimal value embedded in the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the GE 90-30 communication protocol are represented by a hexadecimal value as shown in the following message example.

### GE 90-30 Error Code PLC-499 Message Example



## GE 90-30 SNPX Protocol – PLC Error Code Tables

The following table lists the errors that can be generated by the GE 90-30 PLC when using the SNPX protocol.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Errors for GE 90-30 SNPX Protocol (Major) |  |
|---|--|
| Panel Error Code<br>PLC-499 Hex Value         | Description  |
| No error                                      | Successful completion. (This is the expected completion value in the COMMREQ Status Word.)   |
| 0x0002  | Insufficient Privilege. For Series 90-70 PLC, the minor error code contains the privilege level required for the service request.  |
| 0x0004  | Protocol Sequence Error. The CPU has received a message that is out of order.  |
| 0x0005  | Service Request Error, the minor error code contains the specific error code.  |
| 0x0006  | Illegal Mailbox Type. Service request mailbox type is either undefined or unexpected.  |
| 0x0007  | The PLC CPU's Service Request Queue is full. The master should retry later. It is recommended that the master wait a minimum of 10 msec before sending another service request.  |
| 0x000A  | SNP DOS Driver Error. The minor error code contains the specific error code.   |
| 0x000B  | Illegal Service Request. The requested service is either not defined or not supported. (This value is returned in lieu of the actual 01h value passed in the SNP error message, to avoid confusion with the normal successful COMMREQ completion.) |
| 0x000C  | Local SNP/SNP-X Error. An error occurred within the SNP task in the CMM module in this PLC. This error may occur in either an SNP master or an SNP slave. The minor error code contains the specific error code.                                   |
| 0x000D  | Remote SNP Error. An error occurred within the SNP slave task in the CMM module in the remote PLC. The minor error code contains the specific error code.  |
| 0x000E  | Autodial Error. An error occurred while attempting to send a command string to an attached external modem. The minor error code contains the specific error code.  |
| 0x000F  | SNP-X slave error. An error occurred within the SNPX task in the remote slave device. The minor error code contains the specific error code.   |
| 0x0013  | Port configurator error.   |
| 0x0050  | Problem with sending mail to the slave Service Request task.<br>(Series 90-70 PLC CPUs only)   |
| 0x0051  | Problem with getting mail from the slave Service Request task.<br>(Series 90-70 PLC CPUs only)   |
| 0x0055  | Slave SNP task timed out before receiving an SRP response.<br>(Series 90-70 PLC CPUs only)   |
| 0x0056  | Slave SNP task could not find the requested datagram connection.<br>(Series 90-70 PLC CPUs only)   |
| 0x0057  | Slave SNP task encountered an error in trying to write the datagram.<br>(Series 90-70 PLC CPUs only)   |
| 0x0058  | Slave SNP task encountered an error in trying to update the datagram.<br>(Series 90-70 PLC CPUs only)  |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) |  |
|---|--|
| Panel Error Code<br>PLC-499 Hex Value               | Description  |
| PLC Error 0x010C                                    | WAIT-type COMMREQ is not permitted; must use NOW AIT-type.   |
| PLC Error 0x010E                                    | Not used   |
| PLC Error 0x010F                                    | The service request code in an X-Request message is unsupported or invalid at this time. This error may occur if an SNP-X communication session has not been successfully established at the slave device.   |
| PLC Error 0x020C                                    | COMMREQ command is not supported.  |
| PLC Error 0x020E                                    | The modem command string length exceeds 250 characters.  |
| PLC Error 0x020F                                    | Insufficient privilege level in the slave PLC CPU for the requested SNP-X service.<br>Password protection at PLC CPU may be preventing the requested service.  |
| PLC Error 0x0213                                    | Unsupported COMMREQ. These errors are only generated when there is no protocol currently being run on a port, and the port receives a COMMREQ.<br>(The port may be disabled or an error has occurred in processing a new configuration).                                 |
| PLC Error 0x030C                                    | SNP communication is not active. Must initiate a new SNP communication by sending an Attach or Long Attach COMMREQ.  |
| PLC Error 0x030E                                    | COMMREQ Data Block Length is too small.<br>Output command string data is missing or incomplete.  |
| PLC Error 0x030F                                    | Invalid slave memory type in X-Request message.  |
| PLC Error 0x0313                                    | Invalid COMMREQ length.  |
| PLC Error 0x040C                                    | SNP slave did not respond to Attach message from master.   |
| PLC Error 0x040E                                    | Serial output timeout. The CMM module was unable to transmit the modem autodial output from the serial port. (May be due to missing CTS signal when the CMM is configured to use hardware flow control.)   |
| PLC Error 0x040F                                    | Invalid slave memory address or range in X-Request message.  |
| PLC Error 0x0413                                    | Invalid COMMREQ status word location.  |
| PLC Error 0x050C                                    | Unable to write SNP Status Word to local PLC memory;<br>may be due to invalid Status Word memory type or address.  |
| PLC Error 0x050E                                    | Response was not received from modem. Check modem and cable.   |
| PLC Error 0x050F                                    | Invalid data length in X-Request message.<br>Data length must be non-zero, and may not exceed decimal 1000 bytes.  |
| PLC Error 0x0513                                    | Invalid COMMREQ data.  |
| PLC Error 0x060C                                    | Master device memory type is not valid in this PLC.  |
| PLC Error 0x060E                                    | Modem responded with BUSY.<br>Modem is unable to complete the requested connection. The remote modem is already in use; retry the connection request at a later time.  |
| PLC Error 0x060F                                    | X-Buffer data length does not match the service request in X-Request message.<br>The X-Buffer message length is obtained from the Next Message Length field in the X-Request message; the length of the data within the buffer message is always the message length.     |
| PLC Error 0x070C                                    | Master device memory address or length is zero.  |
| PLC Error 0x070E                                    | Modem responded with NO CARRIER.<br>Modem is unable to complete the requested connection.<br>Check the local and remote modems and the telephone line.   |
| PLC Error 0x070F                                    | Queue Full indication from Service Request Processor in slave PLC CPU.<br>The slave is temporarily unable to complete the service request.<br>The master should try again later. It is recommended that the master wait at least 10 msec before repeating the X-Request. |
| 0x080C  | Unable to read or write master device memory locations specified in COMMREQ. Usually caused by invalid memory address for this PLC. SNP message exchange may have taken place.   |
| 0x080E  | Modem responded with NO DIALTONE. Modem is unable to complete the requested connection. Check the modem connections and the telephone line.  |
| 0x080F  | Service Request Processor response exceeds 1000 bytes;<br>the SNP-X slave device cannot return the data in an X-Response message.<br>(This error applies to CMM module only.)  |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |  |
|--|--|
| Panel Error Code<br>PLC-499 Hex Value                        | Description  |
| 0x090C   | Master device memory data length exceeds maximum data size of CMM module (2048 bytes). Must use a smaller data length. Use multiple COMMREQs if total data length exceeds this maximum value.  |
| 0x090E   | Modem responded with ERROR. Modem is unable to complete the requested command. Check the modem command string and modem.   |
| 0x0A0C   | Slave device memory type is missing or not valid.  |
| 0x0A0E   | Modem responded with RING, indicating that the modem is being called by another modem. Modem is unable to complete the requested command. Retry the modem command at a later time.   |
| 0x0B0C   | Slave device memory address is missing or zero.  |
| 0x0B0E   | An unknown response was received from the modem. Modem is unable to complete the requested command. Check the modem command string and modem. The modem response is expected to be either CONNECT or OK.   |
| 0x0C0C   | COMMREQ Data Block Length is too small.<br>(When expected COMMREQ length is 6 words or less. An improper length may cause other minor error codes 6-11.)   |
| 0x0D0C   | Invalid Diagnostic Status Word (DSW) starting word or length.  |
| 0x0E0C   | Invalid maximum SNP message data size.<br>Must be an even value from 42 to 2048.   |
| 0x0F0C   | Invalid Privilege Level. Must be 0 through 4 or -1.  |
| 0x100C   | Invalid Fault Table selector.<br>Must be 1 for I/O Fault Table, or 2 for PLC Fault Table.  |
| 0x100F   | Unexpected Service Request Processor error.<br>(This error applies to CMM module only; the unexpected SRP error code is saved in the Diagnostic Status Words in the CMM module.)   |
| 0x110C   | Invalid Fault Table starting index.<br>Must be 1-32 for I/O Fault Table, or 1-16 for PLC.  |
| 0x120C   | Invalid fault count. Must be 1-32 for I/O Fault Table, or 1-16 for PLC Fault Table.  |
| 0x130C   | Invalid Set PLC Date/Time mode. Must be 1-4.   |
| 0x140C   | Invalid Set PLC Date/Time date, time, or day-of-week value.  |
| 0x150C   | Unable to retrieve master device PLC time/date from PLC CPU.   |
| 0x150F   | Requested service is not permitted in a Broadcast request. The master must direct the X-Request message to a specific SNP-X slave device.  |
| 0x160C   | Invalid slave PLC type.<br>Must be 0 for Series 90-70, or 1 for Series 90-30 or Series 90-20.  |
| 0x170C   | Invalid datagram type.<br>Must be 01h for normal datagram, or 81h (129) for permanent datagram.  |
| 0x180C   | Missing or too many datagram point formats. Must be 1-32.  |
| 0x190C   | Invalid datagram point format data.  |
| 0x1A0C   | Datagram area size is too small to include data for all specified point formats.   |
| 0x1B0C   | Invalid number of Control Program Names. Must be 1-8.  |
| 0x1C0C   | SNP-X Request exceeds maximum data size (1000 bytes).<br>Must use a smaller data length. Use multiple COMMREQs if necessary.   |
| 0x1D0C   | Invalid SNP-X communication session type.<br>Must be 0 for a single slave device, or 1 for multiple slave devices.   |
| 0x1E0C   | Illegal destination SNP ID specified for SNP-X slave. Must be 0-7 ASCII characters, plus a terminating null character (00h).<br>The Null SNP ID (eight bytes of 00h) may be used to specify any single device. The Broadcast SNP ID (eight bytes of FFh) may be use to specify all slave devices on the serial link. |
| 0x1F0C   | Destination SNP ID does not match SNP-X session type.<br>The Broadcast SNP ID is not permitted in a single-slave SNP-X session.<br>The Null SNP ID is not permitted in a multiple-slave SNP-X session.   |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |   |
|--|---|
| Panel Error Code<br>PLC-499 Hex Value                        | Description   |
| 0x200C   | Inactivity timeout (T3'). The SNP slave has not received any new SNP messages within the configured T3' time interval.  |
| 0x200F   | Invalid Message Type field in a received X-Request message.<br>The message type of an X-Request message must be 58h = 'X'.  |
| 0x210C   | A Parity error has occurred on an Attach, Attach Response, or Update Real-time Datagram message. Communications have not been established.  |
| 0x210F   | Invalid Next Message Type or Next Message Length field in a received X Request message. If this request does not use a buffer (0-2 bytes of data), the Next Message Type must be zero. If this request will be followed with a buffer message (more than 2 byte.)), the Next Message Type must be 54h = 'T', and the Next Message Length must specify the length of the X-Buffer message. Valid X-Buffer message lengths are 9-1008 bytes (data length plus 8 bytes). |
| 0x220C   | A BCC (Block Check Code) error has occurred on an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established.   |
| 0x220F   | Invalid Message Type field in a received X-Buffer message.<br>The message type of an X-Buffer message must be 54h = 'T'.  |
| 0x230C   | A Framing or Overrun serial error has occurred on an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established.  |
| 0x230F   | Invalid Next Message Type field in a received X-Buffer message. Since an X-Buffer message is never followed by another message, the Next Message Type must always be zero.  |
| 0x240C   | An invalid SNP message type was received when an Attach, Attach Response, or Update Realtime Datagram message was required. Communications have not been established.   |
| 0x250C   | An invalid next message length value was specified in an Attach, Attach Response, or Update Realtime Datagram message. Communications have not been established.  |
| 0x260C   | An unexpected SNP message type was received when an Attach, Attach Response, or Update Realtime Datagram was required. Communications have not been established.  |
| 0x270C   | Another Break was received while SNP slave was waiting for an Attach or Update Realtime Datagram message.   |
| 0x280C   | An SNP message has been sent and retried the maximum number of times.<br>A maximum of two retries are permitted.<br>A retry is caused by a NAK from the remote SNP device.  |
| 0x290C   | A received SNP message has been NAKed the maximum number of two times.<br>The NAKed message may be retransmitted a maximum of two times.  |
| 0x2A0C   | An unknown message was received when an acknowledge (ACK or NAK) was required.  |
| 0x2B0C   | Sequence Error. An unexpected SNP message type was received.  |
| 0x2C0C   | Received SNP message contains bad next message length value.  |
| 0x2D0C   | Acknowledge timeout. An acknowledge (ACK or NAK) was not received within the configured T2 time interval. A slave device may generate this error if the master device has aborted after maximum response NAKs and does not NAK the next response retry.   |
| 0x2E0C   | Response timeout. The SNP Master did not receive an SNP Response message within the configured T5' time interval.   |
| 0x2F0C   | Buffer message timeout. An expected Text Buffer or Connection Data message was not received within the configured T5'' time interval.   |
| 0x300C   | Serial output timeout. The CMM module was unable to transmit a Break, an SNP message, or SNP acknowledge (ACK or NAK) from the serial port. (May be due to missing CTS signal when the CMM module is configured to use hardware flow control.)  |
| 0x310C   | SNP slave did not receive a response from the Service Request Processor in the PLC CPU.   |
| 0x320C   | COMMREQ timeout.<br>The COMMREQ did not complete within the configured time interval.   |
| 0x330C   | An SNP Request or Response was aborted prior to completion due to reception of a Break.   |
| 0x340C   | PLC backplane communications error  |
| 0x350C   | Invalid Piggyback Status data memory type or address.<br>Communications have not been established.  |
| 0x360C   | Invalid SNP Slave SNP ID. Must be a 0-7 ASCII characters, plus a terminating null character (00h). The Null SNP ID (eight bytes of 00h) may be used to specify any single slave device.   |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |  |
|--|--|
| Panel Error Code<br>PLC-499 Hex Value                        | Description  |
| 0x370C   | The SNP master has received a response message containing an unexpected data length. Usually indicates a problem with the remote SNP slave device. May occur when Series 90-70 commands (Task Memory or Program Block Memory Read/Write) are issued to a Series 90-30 slave device.  |
| 0x380C   | Response code in received SNP-X response message does not match expected value. (Response code must equal the request code +80h.)  |
| 0x390C   | SNP-X Response message exceeds maximum data size (decimal 1000 bytes). Data in the Response is ignored.  |
| 0x400C   | A parity error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x400D   | The requested service is not supported by the SNP slave.   |
| 0x400F   | Serial output timeout. The slave was unable to transmit an SNP-X message from the serial port. (May be due to missing CTS signal when the CMM module is configured to use hardware flow control.)  |
| 0x410C   | A framing or overrun error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x410D   | SNP slave on CMM module requires PLC CPU privilege level 2 to operate. The SNP slave has rejected a request to change to a higher or lower privilege level.  |
| 0x410F   | An SNP-X request was aborted prior to completion due to reception of a Break.  |
| 0x420C   | A BCC (Block Check Code) error has occurred on an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x420D   | SNP Request or Response message exceeds maximum data length of the CMM module. (Total data length for Mailbox and all following Buffer messages is 2048 bytes.) The master must use a smaller data length. Use multiple requests if total data length exceeds the maximum value.   |
| 0x420F   | An X-Buffer message was received containing greater than 1000 bytes of data. The data is ignored.  |
| 0x430C   | An invalid message type was received when an X-Attach Response was required when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x430D   | Improper Write Datagram message format. Series 90-70 slave devices use a different format for this message than Series 90-30 or Series 90-20 slave devices. The master must use the proper message format for this SNP slave device. (The SNP master in the CMM module sends this message as part of the Establish Datagram COMMREQ command. The datagram has been partially established, but is not usable; the datagram should be cancelled by using the Datagram ID returned by the COMMREQ.) |
| 0x430F   | The SNP-X slave did not receive a response from the Service Request Processor in the PLC CPU.  |
| 0x440C   | An invalid next message type value was detected in an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x440D   | A datagram error occurred in a Series 90-70 slave device (dual-port error).  |
| 0x440F   | PLC backplane communications error.  |
| 0x450C   | An invalid response code was detected in an X-Attach Response message when establishing a new SNP-X communication session. Communications have not been established.   |
| 0x460C   | An expected X-Attach Response message was not received within the response timeout interval when establishing a new SNP-X communication session. The master has retried the X-Attach message twice without receiving a response. Communications have not been established.   |
| 0x500C   | A parity error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established.  |
| 0x500F   | A parity error has occurred in a received X-Attach message.  |
| 0x510C   | A framing or overrun error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established.  |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |  |
|--|--|
| Panel Error Code<br>PLC-499 Hex Value                        | Description  |
| 0x520C   | A BCC (Block Check Code) error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session.<br>Communications have not been established.   |
| 0x520F   | A BCC (Block Check Code) error has occurred in a received X-Attach message.  |
| 0x530C   | An invalid message type was received when an X-Attach Response was required when re-establishing an existing SNP-X communication session.<br>Communications have not been established.   |
| 0x530F   | An invalid Message Type was received when an X-Attach message was required. (For an X-Attach message, the message type must be 58h = 'T'.)   |
| 0x540C   | An invalid Next Message Type value was detected in an X-Attach Response message when re-establishing an existing SNP-X communication session.<br>Communications have not been established.   |
| 0x540F   | An invalid Next Message Type value was detected in a received X-Attach message. (For an X-Attach message, the Next Message Length must be zero.)   |
| 0x550C   | An invalid response code was detected in an X-Attach Response message when re-establishing an existing SNP-X communication session.<br>Communications have not been established.   |
| 0x550F   | An invalid request code was detected in a received X-Attach message.   |
| 0x560C   | An expected X-Attach Response message was not received within the response timeout interval when re-establishing an existing SNP-X communication session. The master has retried the X-Attach message twice without receiving a response.<br>Communications have not been established. |
| 0x600C   | A parity error has occurred on an X-Response message.  |
| 0x600F   | A parity error has occurred in a received X-Request message.   |
| 0x610C   | A framing or overrun error has occurred on an X-Response message.  |
| 0x610F   | A framing or overrun error has occurred in a received X-Request message.   |
| 0x620C   | A BCC (Block Check Code) error has occurred on an X-Response message.  |
| 0x620F   | A BCC (Block Check Code) error has occurred in a received X-Request message.   |
| 0x630C   | An invalid message type was received when an X-Response message was required.  |
| 0x640C   | An invalid next message type value was detected in an X-Response message.  |
| 0x650C   | An invalid response code was detected in an X-Response message.  |
| 0x660C   | An expected X-Response message was not received within the response time.  |
| 0x700C   | A parity error has occurred on an Intermediate Response message.   |
| 0x700F   | A parity error has occurred in a received X-Buffer message.  |
| 0x710C   | A framing or overrun error has occurred on an Intermediate Response message.   |
| 0x710F   | A framing or overrun error has occurred in a received X-Buffer message.  |
| 0x720C   | A BCC (Block Check Code) error has occurred on an Intermediate Response message.   |
| 0x720F   | A BCC (Block Check Code) error has occurred in a received X-Buffer message.  |
| 0x730C   | An invalid message type was received when an Intermediate Response message was required.   |
| 0x730F   | An expected X-Buffer message was not received.   |
| 0x740C   | An invalid next message type value was detected in an Intermediate Response message.   |
| 0x750C   | An invalid response code was detected in an Intermediate Response message.   |
| 0x760C   | An expected Intermediate Response message was not received within the response timeout interval.   |
| 0x8D0A   | Bad DOS Version. Must have DOS 2.0, or later, to support the SNP DOS Driver.   |
| 0x8E0A   | PC Serial port configured for SNP Master driver is not open; no communication can take place.  |
| 0x8F0A   | Out-of-Sequence SNP message. SNP message type received was not the type expected.  |
| 0x900A   | Bad SNP BCC encountered. Transmission was aborted after maximum retries due to a bad Block Check Code.   |
| 0x910A   | Bad SNP communication. Transmission was aborted after maximum retries due to serial errors (that is, parity, overrun, or framing errors).  |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)



## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |   |
|--|---|
| <b>Panel Error Code<br/>PLC-499 Hex Value</b>                | <b>Description</b>  |
| 0x920A   | No SNP communication. Either communication has been lost or a communication session has not been established. |
| 0xC105   | Invalid block state transition.   |
| 0xC205   | The OEM key is NULL (inactive).   |
| 0xC305   | Text length does not match traffic type.  |
| 0xC405   | Verify with FA Card or EEPROM failed.   |
| 0xC505   | No task-level Rack/Slot configuration to read or delete.  |
| 0xC605   | Control Program (CP) tasks exist but requestor not logged into main CP.                                       |
| 0xC705   | Passwords are set to inactive and cannot be enabled or disabled.  |
| 0xC805   | Password(s) already enabled and can not be forced inactive.   |
| 0xC905   | Login using non-zero buffer size required for block commands.   |
| 0xCA05   | Device is write-protected.  |
| 0xCB05   | A comm or write verify error occurred during save or restore.   |
| 0xCC05   | Data stored on device has been corrupted and is no longer reliable.   |
| 0xCD05   | Attempt was made to read a device but no data has been stored on it.  |
| 0xCE05   | Specified device has insufficient memory to handle request.   |
| 0xCF05   | Specified device is not available in the system (not present).  |
| 0xD005   | One or more PLC modules configured have unsupported revision.   |
| 0xD105   | Packet size or total program size does not match input.   |
| 0xD205   | Invalid write mode parameter.   |
| 0xD305   | User Program Module (UPM) read or write exceeded block end.   |
| 0xD405   | Mismatch of configuration checksum.   |
| 0xD505   | Invalid block name specified in datagram.   |
| 0xD605   | Total datagram connection memory exceeded.  |
| 0xD705   | Invalid datagram type specified.  |
| 0xD805   | Point length not allowed.   |
| 0xD905   | Transfer type invalid for this Memory Type selector.  |
| 0xDA05   | Null pointer to data in Memory Type selector.   |
| 0xDB05   | Invalid Memory Type selector in datagram.   |
| 0xDC05   | Unable to find connection address.  |
| 0xDD05   | Unable to locate given datagram connection ID.  |
| 0xDE05   | Size of datagram connection invalid.  |
| 0xDF05   | Invalid datagram connection address.  |
| 0xE005   | Service in process cannot login.  |
| 0xE105   | No I/O configuration to read or delete.   |
| 0xE205   | IOS could not delete configuration, or bad type.  |
| 0xE305   | CPU revision number does not match.   |
| 0xE405   | Memory Type for this selector does not exist.   |
| 0xE505   | DOS file area not formatted.  |
| 0xE605   | CPU model number does not match.  |
| 0xE705   | Configuration is not valid.   |
| 0xE805   | No user memory is available to allocate.  |
| 0xE905   | Memory Type selector not valid in context.  |
| 0xEA05   | Not logged in to process service request.   |
| 0xEB05   | Task unable to be deleted.  |

(PLC generated error codes for the GE 90-30 SNPX protocol continued on the next page.)

## GE 90-30 SNPX Protocol – PLC Error Code Tables (cont'd)

| PLC Errors for GE 90-30 SNPX Protocol (Minor-Major) (cont'd) |   |
|--|---|
| <b>Panel Error Code<br/>PLC-499 Hex Value</b>                | <b>Description</b>                        |
| 0xEC05   | Task unable to be created.                |
| 0xED05   | VME bus error encountered.                |
| 0xEE05   | Could not return block sizes.             |
| 0xEF05   | Programmer is already attached.           |
| 0xF005   | Request only valid in stop mode.          |
| 0xF105   | Request only valid from programmer.       |
| 0xF205   | Invalid program cannot log in.            |
| 0xF305   | I/O configuration mismatch.               |
| 0xF405   | Invalid input parameter in request.       |
| 0xF505   | Invalid password.                         |
| 0xF605   | Invalid sweep state to set.               |
| 0xF705   | Required to log in to a task for service. |
| 0xF805   | Invalid Task Name referenced.             |
| 0xF905   | Task address out of range.                |
| 0xFA05   | Cannot replace I/O module.                |
| 0xFB05   | Cannot clear I/O configuration.           |
| 0xFC05   | I/O configuration is invalid.             |
| 0xFD05   | Unable to perform auto configuration.     |
| 0xFE05   | No privilege for attempted operation.     |
| 0xFF05   | Service Request Error has been aborted.   |

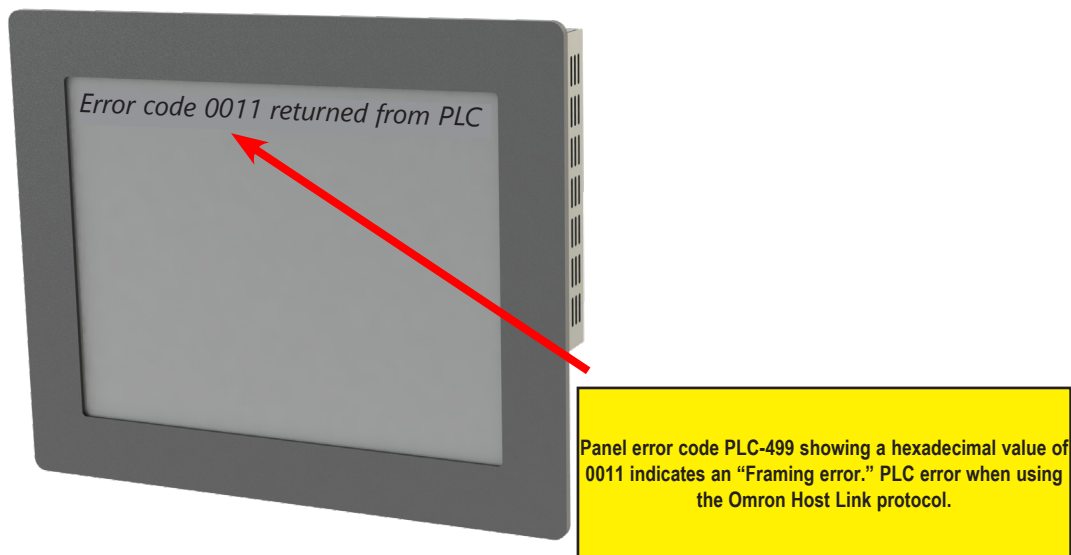
## Mitsubishi FX Protocol – PLC Error Codes

Only errors as listed in the Touch Panel Error Code Table shown previously in this Appendix can occur when using the Mitsubishi FX protocol, there are no PLC generated errors.

## Omron – Panel Error Code PLC-499 Explanation

The PLC-499 error code is used to show any errors that are generated by the connected PLC. The PLC-499 error message includes a four-digit hexadecimal value embedded in the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Omron Host Link and FINS communication protocol are represented by a hexadecimal value as shown in the following message example.

### Omron Error Code PLC-499 Message Example



## Omron Host Link Protocol – PLC Error Code Table

The following table lists the errors that can be generated by the Omron PLC when using the Host Link protocol.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Error Codes for Omron Host Link   |   |
|---------------------------------------|---|
| Panel Error Code<br>PLC-499 Hex Value | Description   |
| 0x0000                                | Normal Completion.  |
| 0x0001                                | Not executable in RUN mode.   |
| 0x0002                                | Not executable in MONITOR mode.   |
| 0x0003                                | Not executable with PROM mounted.   |
| 0x0004                                | Address over (data overflow).   |
| 0x000B                                | Not executable in PROGRAM mode.   |
| 0x000C                                | Not executable in DEBUG mode.   |
| 0x000D                                | Not executable in LOCAL mode.   |
| 0x0010                                | Parity error.   |
| 0x0011                                | Framing error.  |
| 0x0012                                | Overrun.  |
| 0x0013                                | FCS error.  |
| 0x0014                                | Format error (parameter length error).  |
| 0x0015                                | Entry number data error (parameter error, data code error, data length error).  |
| 0x0016                                | Instruction not found.  |
| 0x0018                                | Frame length error.   |
| 0x0019                                | Not executable (due to Un-executable error clear, non-registration of I/O table, etc.).                                     |
| 0x0020                                | I/O table generation impossible (unrecognized remote I/O unit, channel over, duplication of optical transmitting I/O unit). |
| 0x00A0                                | Abort due to parity error in transmit data under process.   |
| 0x00A1                                | Abort due to framing error in transmit data under process.  |
| 0x00A2                                | Abort due to overrun in transmit data under process.  |
| 0x00A3                                | Abort due to FCS error in transmit data under process.  |
| 0x00A4                                | Abort due to format error in transmit data under process.   |
| 0x00A5                                | Abort due to frame length error in transmit data under process.   |
| 0x00A8                                | Abort due to entry number data error in transmit data under process.  |
| 0x00B0                                | Un-executable due to program area capacity other than 16k bytes.  |

## Omron FINS Protocol – PLC Error Code Table

The following table lists the errors that can be generated by the Omron PLC when using the FINS protocol.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-499 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

| PLC Error Codes for Omron FINS        |  |
|---------------------------------------|--|
| Panel Error Code<br>PLC-499 Hex Value | Description  |
| 0x0000                                | Normal Completion.                                       |
| 0x0001                                | Service Canceled.  |
| 0x0101                                | Local Error: Local node not in network.                  |
| 0x0102                                | Local Error: Token Timeout.                              |
| 0x0103                                | Local Error: Retries Failed.                             |
| 0x0104                                | Local Error: Too many send frames.                       |
| 0x0105                                | Local Error: Node address range error.                   |
| 0x0106                                | Local Error: Node Address Duplication.                   |
| 0x0201                                | Destination Node Error: Destination Node not in network. |
| 0x0202                                | Destination Node Error: Unit Missing.                    |
| 0x0203                                | Destination Node Error: Third Node missing.              |
| 0x0204                                | Destination Node Error: Destination Node busy.           |
| 0x0205                                | Destination Node Error: Response Timeout.                |
| 0x0301                                | Controller Error: Communications Controller Error.       |
| 0x0302                                | Controller Error: CPU Unit Error.                        |
| 0x0303                                | Controller Error: Controller Error.                      |
| 0x0304                                | Controller Error: Unit number Error.                     |
| 0x0401                                | Service Unsupported: Undefined Command.                  |
| 0x0402                                | Service Unsupported: Not supported by Model/Version.     |
| 0x0501                                | Routing Table Error: Destination address setting error.  |
| 0x0502                                | Routing Table Error: No routing tables.                  |
| 0x0503                                | Routing Table Error: Routing table error.                |
| 0x0504                                | Routing Table Error: Too many delays.                    |
| 0x1001                                | Command Format Error: Command too long.                  |
| 0x1002                                | Command Format Error: Command too short.                 |
| 0x1003                                | Command Format Error: Elements/Data don't match.         |
| 0x1004                                | Command Format Error: Command format error.              |
| 0x1005                                | Command Format Error: Header Error.                      |
| 0x1101                                | Parameter Error: Area classification missing.            |
| 0x1102                                | Parameter Error: Access Size Error.                      |
| 0x1103                                | Parameter Error: Address range error.                    |
| 0x1104                                | Parameter Error: Address range exceeded.                 |
| 0x1106                                | Parameter Error: Program Missing.                        |
| 0x1109                                | Parameter Error: Relational Error.                       |
| 0x110A                                | Parameter Error: Duplicate Data Access.                  |
| 0x110B                                | Parameter Error: Response too long.                      |
| 0x110C                                | Parameter Error: Parameter Error.                        |
| 0x2002                                | Read Not Possible: Protected.                            |

(PLC generated error codes for the Omron FINS protocol continued on the next page.)

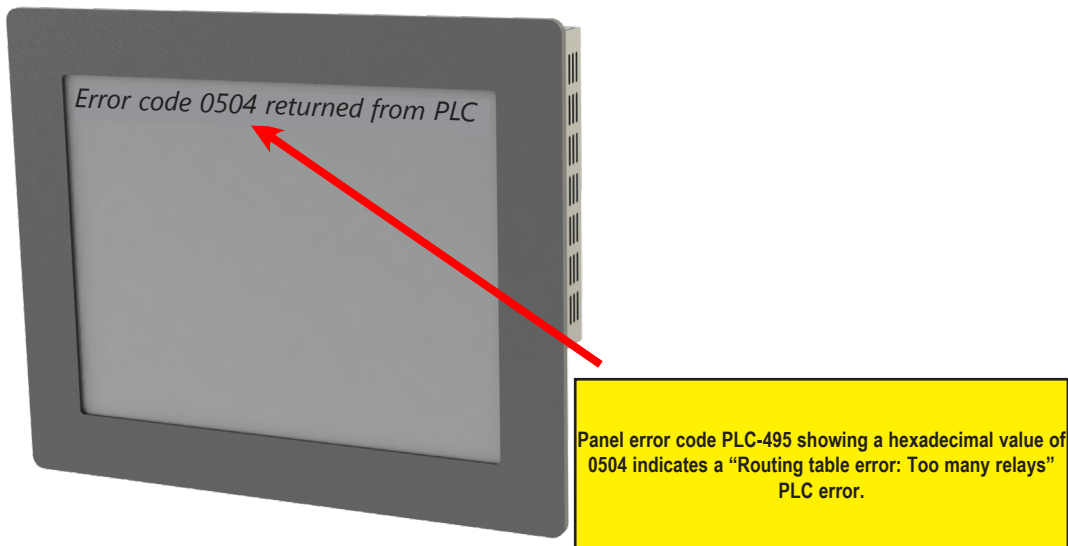
## Omron FINS Protocol – PLC Error Code Table (cont'd)

| PLC Error Codes for Omron FINS        |  |
|---------------------------------------|--|
| Panel Error Code<br>PLC-499 Hex Value | Description  |
| 0x2003                                | Read Not Possible: Table missing.                                |
| 0x2004                                | Read Not Possible: Data missing.                                 |
| 0x2005                                | Read Not Possible: Program missing.                              |
| 0x2006                                | Read Not Possible: File missing.                                 |
| 0x2007                                | Read Not Possible: Data mismatch.                                |
| 0x2101                                | Write Not Possible: Read Only.                                   |
| 0x2102                                | Write Not Possible: Protected - cannot write data link table.    |
| 0x2103                                | Write Not Possible: Cannot register.                             |
| 0x2105                                | Write Not Possible: Program missing.                             |
| 0x2106                                | Write Not Possible: File missing.                                |
| 0x2107                                | Write Not Possible: File name already exists.                    |
| 0x2108                                | Write Not Possible: Cannot change.                               |
| 0x2201                                | Not executable in current mode: Not possible during execution.   |
| 0x2202                                | Not executable in current mode: Not possible while running.      |
| 0x2203                                | Not executable in current mode: Wrong PLC mode (Program).        |
| 0x2204                                | Not executable in current mode: Wrong PLC mode (Debug).          |
| 0x2205                                | Not executable in current mode: Wrong PLC mode (Monitor).        |
| 0x2206                                | Not executable in current mode: Wrong PLC mode (Run).            |
| 0x2207                                | Not executable in current mode: Specified node not polling node. |
| 0x2208                                | Not executable in current mode: Step cannot be executed.         |
| 0x2301                                | No such device: File device missing.                             |
| 0x2302                                | No such device: Missing memory.                                  |
| 0x2303                                | No such device: Clock missing.                                   |
| 0x2401                                | Cannot Start/Stop: Table missing.                                |
| 0x2502                                | Unit Error: Memory Error.  |
| 0x2503                                | Unit Error: I/O setting Error.                                   |
| 0x2504                                | Unit Error: Too many I/O points.                                 |
| 0x2505                                | Unit Error: CPU bus error.                                       |
| 0x2506                                | Unit Error: I/O Duplication.                                     |
| 0x2507                                | Unit Error: I/O bus error.                                       |
| 0x2509                                | Unit Error: SYSMAC BUS/2 error.                                  |
| 0x250A                                | Unit Error: CPU Bus Unit Error.                                  |
| 0x250D                                | Unit Error: SYSMAC BUS No. duplication.                          |
| 0x250F                                | Unit Error: Memory Error.  |
| 0x2510                                | Unit Error: SYSMAC BUS terminator missing.                       |
| 0x2601                                | Command Error: No protection.                                    |
| 0x2602                                | Command Error: Incorrect password.                               |
| 0x2604                                | Command Error: Protected.  |
| 0x2605                                | Command Error: Service already executing.                        |
| 0x2606                                | Command Error: Service stopped.                                  |
| 0x2607                                | Command Error: No execution right.                               |
| 0x2608                                | Command Error: Settings not complete.                            |
| 0x2609                                | Command Error: Necessary items not set.                          |
| 0x260A                                | Command Error: Number already defined.                           |
| 0x260B                                | Command Error: Error will not clear.                             |
| 0x3001                                | Access Right Error: No access right.                             |
| 0x4001                                | Abort: Service aborted.  |

## Omron – Panel Error Code PLC-495 Explanation

The PLC-495 error code is used to show any errors that are generated by the connected PLC. The PLC-495 error message includes a four-digit hexadecimal value embedded in the message. This value can be looked up in the specific PLC’s error tables to determine the cause of the error. The possible PLC generated error codes for the Omron CS/CJ FINS Ethernet communication protocol are represented by a hexadecimal value as shown in the following message example.

### Omron Error Code PLC-495 Message Example



## Omron CS/CJ FINS Ethernet Protocol – PLC Error Code Table

The following table lists the errors that can be generated by the Omron PLC when using the CS/CJ FINS Ethernet protocol.



*NOTE: The following errors can be generated from the designated PLC, are monitored by the C-more touch panel, and displayed on the touch panel's screen as a hexadecimal value in panel error code PLC-495 message, if active. Please refer to the PLC manufacturer's documentation for additional information.*

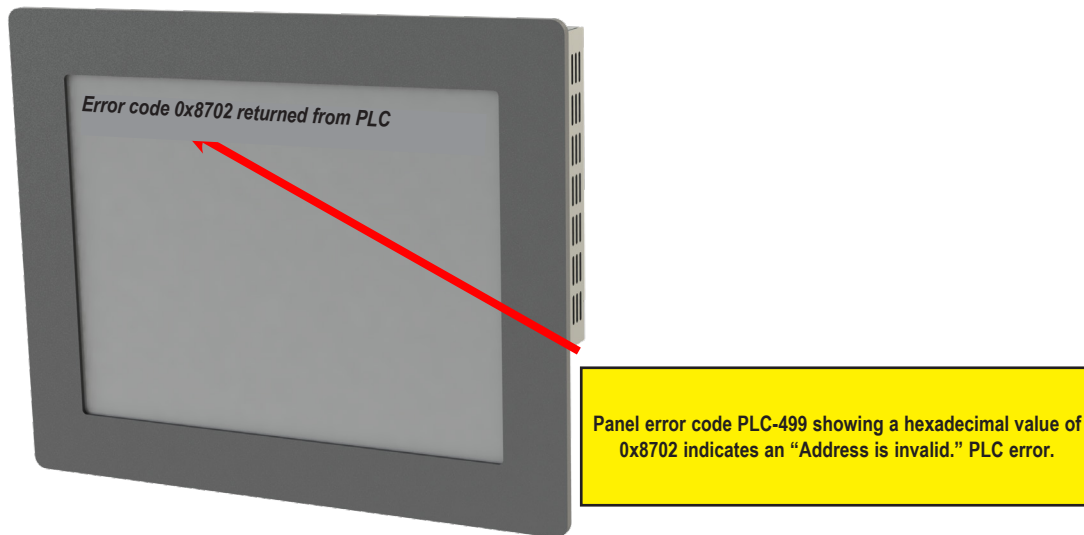
| PLC Error Codes for Omron CS/CJ FINS Ethernet |   |
|---|---|
| Panel Error Code<br>PLC-495 Hex Value         | Description   |
| 0103  | Local Error: Send Error from lack of buffer space. Try reducing Ethernet load to the module.  |
| 0201  | Destination Node Error: IP address of remote node not set correctly.  |
| 0202  | Destination Node Error: No node with the specified unit address found.  |
| 0205  | Destination Node Error: Packet corrupted or Response timeout. Try increasing timeout.   |
| 0301  | Controller Error: Communications controller error.  |
| 0302  | Controller Error: CPU Unit error. Check error LEDs on PLC. Refer to documentation for that CPU.   |
| 0304  | Controller Error: Unit number error. Make sure Unit number is not used twice.   |
| 0401  | Service unsupported: Undefined command.   |
| 0501  | Routing table error: Destination address setting error. Routing table incorrect.  |
| 0502  | Routing table error: No routing tables.   |
| 0503  | Routing table error: Routing table error.   |
| 0504  | Routing table error: Too many relays.   |
| 1001  | Command format error: Command too long. Bad packet: check for electrical noise and grounding.   |
| 1002  | Command format error: Command too short. Bad packet: check for electrical noise and grounding.  |
| 1003  | Command format error: Elements/data don't match. Bad packet: check for electrical noise and grounding.  |
| 1005  | Command format error: Header error. This is the error received when station # set in the command does not match the station # of the Ethernet module. |
| 1100  | Parameter error: UDP socket number bad.   |
| 1101  | Parameter error: Address requested does not exist in PLC.   |
| 1103  | Parameter error: Address area requested in not accessible.  |
| 220F  | Status error: Duplicate Socket error.   |
| 2210  | Status error: Specified socket not open.  |
| 2305  | Environment Error: IP address conversion failed. Only encountered when using routing tables.  |
| 2307  | Environment Error: IP address conversion set for automatic.   |
| 2503  | Unit error: I/O setting error.  |
| 2505  | Unit error: CPU bus error.  |
| 250A  | Unit error: CPU Bus Unit error.   |



## Siemens – Panel Error Code P499 Explanation

The PLC-499 error code is used to show any errors that are generated by the connected PLC. The PLC-499 error message includes a four-digit hexadecimal value displayed at the end of the message. This value can be looked up in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the Siemens PPI communication protocols breakdown into a four-digit hexadecimal value as shown in the following message example.

### Siemens Error Code PLC-499 Message Example



## Siemens PPI Protocol – PLC Error Code Table

| PLC PDU Header Errors for S7-200 PPI          |   |
|---|---|
| <b>Panel Error Code<br/>PLC-499 Hex Value</b> | <b>Description</b>  |
| 0x0001  | Hardware Fault.   |
| 0x0003  | Object access not allowed: Occurs when access to Timer and Counter data type is set to Signed Integer and not BCD.  |
| 0x0004  | Context not supported.  |
| 0x0005  | Address out of range: Occurs when requesting an address within a Data Block that does not exist or is out of range. |
| 0x0006  | Address out of range.   |
| 0x0007  | Write Data size mismatch.   |
| 0x000A  | Object does not exist: Occurs when trying to request a Data Block that does not exist.                              |
| 0x8000  | Function being used.  |
| 0x8001  | Action is not allowed in current mode.  |
| 0x8101  | Hardware fault.   |
| 0x8103  | Access not allowed.   |
| 0x8104  | Function not supported.   |
| 0x8105  | Address invalid.  |
| 0x8106  | Data Type not supported.  |
| 0x8107  | Data Type is not consistent with size.  |
| 0x810A  | Object does not exist.  |
| 0x8500  | PDU Size is incorrect.  |
| 0x8702  | Address is invalid.   |
| 0xD201  | Block name syntax error.  |
| 0xD202  | Error with function parameter.  |
| 0xD203  | Error with block type.  |
| 0xD204  | No linked block.  |
| 0xD205  | Object already exists.  |
| 0xD206  | Object already exists.  |
| 0xD207  | Block already used in EPROM.  |
| 0xD209  | Block does not exist.   |
| 0xD20E  | No Block does not exist.  |
| 0xD210  | Block number incorrect.   |

## Siemens ISO over TCP Protocol – PLC Error Code Table

| PLC PDU Header Errors for S7-300 CPU; S7-200, S7-400, S7-1200, S7-1500 Ethernet |   |
|---|---|
| <b>Panel Error Code<br/>PLC-499 Hex Value</b>                                   | <b>Description</b>  |
| 0x0001  | Hardware Fault.   |
| 0x0003  | Object access not allowed: Occurs when access to Timer and Counter data type is set to Signed Integer and not BCD.  |
| 0x0004  | Context not supported.  |
| 0x0005  | Address out of range: Occurs when requesting an address within a Data Block that does not exist or is out of range. |
| 0x0006  | Address out of range.   |
| 0x0007  | Write Data size mismatch.   |
| 0x000A  | Object does not exist: Occurs when trying to request a Data Block that does not exist.                              |
| 0x8000  | Function being used.  |
| 0x8001  | Action is not allowed in current mode.  |
| 0x8101  | Hardware fault.   |
| 0x8103  | Access not allowed.   |
| 0x8104  | Function not supported.   |
| 0x8105  | Address invalid.  |
| 0x8106  | Data Type not supported.  |
| 0x8107  | Data Type is not consistent with size.  |
| 0x810A  | Object does not exist.  |
| 0x8500  | PDU Size is incorrect.  |
| 0x8702  | Address is invalid.   |
| 0xD201  | Block name syntax error.  |
| 0xD202  | Error with function parameter.  |
| 0xD203  | Error with block type.  |
| 0xD204  | No linked block.  |
| 0xD205  | Object already exists.  |
| 0xD206  | Object already exists.  |
| 0xD207  | Block already used in EPROM.  |
| 0xD209  | Block does not exist.   |
| 0xD20E  | No Block does not exist.  |
| 0xD210  | Block number incorrect.   |

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