Panel & PLC Error Code Tables

In this Chapter...

Introduction **A-2**

C-more **Micro Panel Error Code Table** **A-3**

Modbus Protocols Error Code P499 Explanation **A-4**

AutomationDirect CLICK A-4

AutomationDirect DirectLOGIC - Modbus (Koyo) A-4

Modicon Modbus RTU A-4

Entivity Modbus RTU A-4

Productivity Error Code P499 Explanation **A-5**

Do-more / BRX Error Code P499 Explanation **A-6**

Direct**LOGIC Error Code P499 Explanation** **A-7**

Direct**LOGIC – K-Sequence PLC Error Code Table** **A-7**

Direct**LOGIC – *Direct*NET PLC Error Codes** **A-7**

Allen-Bradley Error Code P499 Explanation **A-8**

Allen-Bradley DF1 Protocol – PLC Error Code Tables **A-9**

Allen-Bradley DH485 Protocol – PLC Error Code Tables **A-11**

GE Error Code P499 Explanation **A-13**

GE SNPX Protocol – PLC Error Code Tables **A-14**

Mitsubishi FX Protocol – PLC Error Codes **A-23**

Mitsubishi Q / QnA Series – PLC Error Codes **A-23**

Omron Error Code P499 Explanation **A-25**

Omron Host Link Protocol – PLC Error Code Table **A-26**

Omron FINS Protocol – PLC Error Code Table **A-27**

Siemens Error Code P499 Explanation **A-30**

Siemens PPI Protocol – PLC Error Code Table **A-31**

Introduction

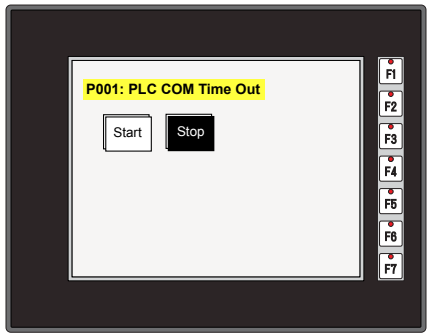
The ***C-more*®** Micro panels are capable of communicating over RS232, RS422 and RS485 serial networks. They communicate with Productivity Series PAC's, Do-more / BRX PLC's, CLICK PLC's, all controllers in the ***Direct*** LOGIC family of PLCs utilizing various protocols, and certain 3rd party PLCs. For a complete list of the supported PLCs and protocols, see the PLC Drivers table in **Chapter 6: PLC Communications**.

As with any network communications, errors may occur. To simplify identification of the possible cause of the error, we have provided tables listing these errors. If a ***C-more*** Micro panel communications error, or other related data exchange error does occur, the error message will appear across the top of the display screen as shown in the example below. A complete table of the panel generated errors, with their respective error codes, error messages, and the possible causes of the error follows.

The ***C-more*** Micro panel also monitors any errors that are generated by the PLC that is 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. An explanation of how the specific PLC error is identified in the panel error code P499 is shown preceeding the specific manufacturer's PLC error tables. How the hexadecimal error code value is interpreted is slightly different between manufacturers, so it is important to check the explanation at the beginning of each manufacturer's tables. Since these errors are generated by the PLC, refer to the PLC manufacturers documentation for further explanation.

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 group at 770-844-4200.

C-more Micro Panel Error Example



C-more Micro 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 Micro Panel Error Table		
Error Code	**Error Message**	**Cause**
P001	PLC Com Time Out	A timeout occurred after sending a request to the PLC.
P002	NAK Received	A negative acknowledgement (NAK) control code has been generated during a read/write request.
P003	EOT Received	An end of transmission has been sent by PLC in response to a read/write/setbit request.
P004	STX is Not Found	A Start of Text (STX) control code was not found in the data packet received from the PLC.
P005	ETX/ETB NotFound	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.
P006	LRC 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.
P007	CRC 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.
P008	Address NotMatch	The address value returned in the data packet from the PLC is incorrect.
P009	Re.INV.FUN.Code	The function code returned in the data packet from the PLC is incorrect.
P010	DataSizeNotMatch	There are an incorrect number of bytes found in the data packet returned from the PLC.
P011	INV.Val.FUN.Code	There is an invalid value in the function code.
P012	INVALID COMMAND	There was an invalid command sent to the PLC that wasn't recognized by the PLC.
P013	ENQ Received	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.
P014	TransID NotMatch	This error will be displayed if after checking the Transaction ID Byte in the data packet, there is no match to what was requested.
P015	Device Not Found	A PLC device designated as Device could not be found.
P016	DataByte Com.Err	The data part of the packet received contains 0 bytes of data.
P017	Out of Add.Range	The touch panel requested a file number larger than 255.
P019	Parity Error	Parity error occurred.
P020	Can'tOpenS.Port	Can't open serial port
P021	PLC# Not Match	PLC Number does not match
P022	Can't Reset DCB	Unable to reset the Data Communications Bit
P023	Not Connected	Cable not connected properly
P024	No Other Dev.	Cannot detect other devices
P025	PollingListErr	Panel not in polling list
P026	PLC Connection Time Out	PLC Connection Time Out
P027	Memory Error	Memory Type Incorrect
P028	No Response	PLC failed to Respond: %PLC Node#%??

C-more Micro Panel Error Code Table continues on the next page.

A

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

C-more Micro Panel Error Table (cont'd)		
Error Code	**Error Message**	**Cause**
P499*	**ErrCode Received -> Recv .Err Code XXXX**	**A PLC generated error code with a hexadecimal value of XXXX has been returned from the PLC. * See the explanation for error code P499 proceeding each set of PLC error code tables.**
P500	Can'tWriteS.Port	Data cannot be written to the Serial port. Data was sent to the PLC via the Serial Port. If this error shows on the Panel, it indicates a Hardware Problem.
P700	RD.Buff.MEM Full	There was an error while allocating memory for the read buffer. When this error is displayed, a memory leak may have occurred.
P701	INV.PLC Address	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.
P702	INV.FUN.Code	A Read/Write/SetBit request has been sent to an invalid memory area. This error is an indication that there is a problem in the HMI layer.
P703	WRT.PLC.ReadOnly	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.

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

Entivity Modbus RTU

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro panel, and displayed on the panel's screen as a hexadecimal value in panel error code P499, if active.*

PLC Error Codes Modbus Protocols		
Panel Error Code P499 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.

Productivity Error Code P499 Explanation

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro 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 P499 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 ***C-more*** Micro 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 ***C-more*** Micro 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.

A

Do-more / BRX Error Code P499 Explanation

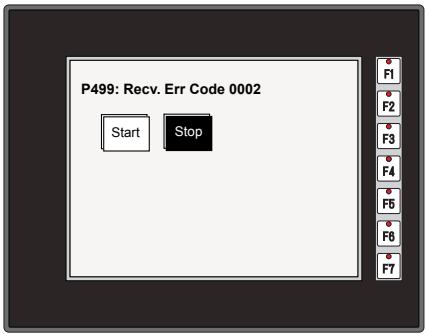
NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro panel, and displayed on the panel's screen as a hexadecimal value in panel error code P499, if active.*

PLC Errors for Do-more / BRX		
Error Code	**Description**	**Resolution**
0x01	Unknown Command	Occurs when a 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 the 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 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 use the program to 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 ***C-more*** Micro Panel 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.
0x010	Doc Update Active	Occurs when someone attempts to access the documentation file while it is being written back to ROM.
0x011	Invalid Driver	Occurs when attempting to read driver data from a driver that doesn't exist.
0x012	Invalid Driver Data	Occurs when attempting to read a driver data type that isn't valid.
0x013	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.

*Direct*LOGIC Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 error message includes a four digit hexadecimal value displayed at the end of the message. This value can be found in the specific PLC's error tables to determine the cause of the error. The possible PLC generated error codes for the various ***Direct***LOGIC communication protocols breakdown into a four digit hexadecimal value.

*Direct*LOGIC PLC Error Code Displayed Example:



*Direct*LOGIC – K-Sequence PLC Error Code Table

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

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro 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 Direct Logic – K-Sequence	
Panel Error Code P499 Hex Value	**Description**
01F8	Error setting value.
020D	Error in key mode.
021C	Password protected.

*Direct*LOGIC – *Direct*NET PLC Error Codes

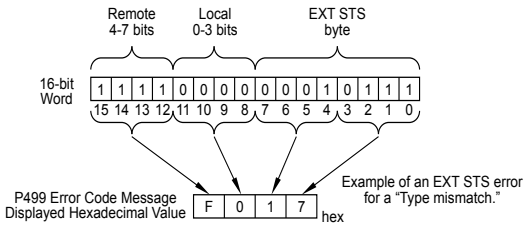
There are no PLC generated errors that occur when using the ***Direct***NET protocol.

A

Allen-Bradley Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 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 Allen-Bradley DF1 and DH485 communication protocol is 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.

AB DF1 Protocol Error Code P499 Breakdown



AB DF1 Protocol – Multiple Error Code Examples

	Example 1	Example 2	Example 3
Remote 4-7 bits	F x x x	1 x x x	F x x x
+			
Local 0-3 bits	x 0 x x	x 1 x x	x 1 x x
+			
EXT STS byte	x x 0 9	x x 0 0	x x 0 9
=			
Error P499 Value Displayed	F 0 0 9	1 1 0 0	F 1 0 9

Allen-Bradley PLC Error Code Displayed Example:

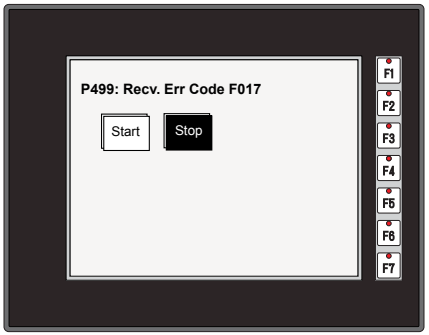
Error Recieved = P499: Recv. Err Code 3200

Remote = 0x**3**000 = Remote node host is missing, disconnected or shut down.

Local - 0x0**2**00 = Cannot Guarantee Delivery; Link Layer. The remote node specified does not ACK Command

EXT STS = 00**00** = None

Remote 4-7 bits	3	x	x	x
+				
Local 0-3 bits	x	2	x	x
+				
EXT STS byte	x	x	0	0
=				
Error P499 Value Displayed	3	2	0	0



Allen-Bradley DF1 Protocol – PLC Error Code Tables

The following PLC error tables cover possible errors that are detected by the panel from Allen-Bradley PLCs using the DF1 protocol. This 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*** *Micro 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, Remote STS Errors (4-7 bits)	
Panel Error Code P499 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 Errors for Allen-Bradley DF1 Protocol, Local STS Errors (0-3 bits)	
Panel Error Code P499 Hex Value	**Description**
0x0	Success; no error.
0x1	DST node is out of buffer space.
0x2	Cannot guarantee delivery; link layer. (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 generated error code for the Allen-Bradley DF1 Protocol continue on the next page.

A

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 P499 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; 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	Reserved
0x1D	Reserved
0x1E	Data table element protection violation.
0x1F	Temporary internal problem.

Allen-Bradley DH485 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 DH485 protocol. This includes all MicroLogix and SLC500 PLCs, and any communication connection using an Allen-Bradley AIC device using the DH485 protocol.

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro 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 DH485 Protocol, Remote STS Errors (4-7 bits)	
Panel Error Code P499 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 Errors for Allen-Bradley DH485 Protocol, Local STS Errors (0-3 bits)	
Panel Error Code P499 Hex Value	**Description**
0x0	Success; no error.
0x1	DST node is out of buffer space.
0x2	Cannot guarantee delivery; link layer. (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 generated error codes for the Allen-Bradley DH485 protocol continue on the next page.

A

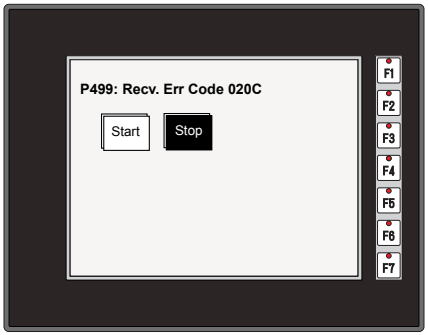
Allen-Bradley DH485 Protocol – PLC Error Code Tables (cont'd)

PLC Errors for Allen-Bradley DH485 Protocol, EXT STS Command Code for F0 Command	
Panel Error Code P499 Hex Value	**Description**
0x7	Insufficient memory module size (0000h is returned).
0xB	Access denied; privilege violation.
0xC	Resource not available or cannot do.
0xE	CMD cannot be executed.
0x12	Invalid parameter.
0x14	Failure during processing.
0x19	Duplicate label.
0x1A	File open by another node + owner's local node address, 1 byte.
0x1B	Program owned by another node + program owner's local node address, 1 byte.

GE Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 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 GE 90-30, 90-70, Micro 90 and VersaMax Micro SNPX communication protocols breakdown into a four digit hexadecimal value.

GE Error Code P499 Message Example:



A

GE SNPX Protocol – PLC Error Code Tables

The following table lists the errors that can be generated by the GE 90-30, 90-70 and VersaMax PLC when using the SNPX protocol.

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro 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 SNPX Protocol (Major)	
Panel Error Code P499 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. (Series 90-70 PLC CPUs only)
0x0051	Problem with getting mail from the slave Service Request task. (Series 90-70 PLC CPUs only)
0x0055	Slave SNP task timed out before receiving an SRP response. (Series 90-70 PLC CPUs only)
0x0056	Slave SNP task could not find the requested datagram connection. (Series 90-70 PLC CPUs only)
0x0057	Slave SNP task encountered an error in trying to write the datagram. (Series 90-70 PLC CPUs only)
0x0058	Slave SNP task encountered an error in trying to update the datagram. (Series 90-70 PLC CPUs only)

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 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 success fully 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. 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. (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. 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; 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. 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. 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. 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. Modem is unable to complete the requested connection. Check the local and remote modems and the telephone line.
PLC Error 0x070F	Queue Full indication from Service Request Processor in slave PLC CPU. The slave is temporarily unable to complete the service request. The master should try again later. It is recommended that the master wait at least 10 msec before repeating the X-Request.

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continued on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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; the SNP-X slave device cannot return the data in an X-Response message. (This error applies to CMM module only.)
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. (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. 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. Must be 1 for I/O Fault Table, or 2 for PLC Fault Table.
0x100F	Unexpected Service Request Processor error. (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. 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. Must be 0 for Series 90-70, or 1 for Series 90-30 or Series 90-20.
0x170C	Invalid datagram type. 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.

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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). Must use a smaller data length. Use multiple COMMREQs if necessary.
0x1D0C	Invalid SNP-X communication session type. 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). 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. The Broadcast SNP ID is not permitted in a single-slave SNP-X session. The Null SNP ID is not permitted in a multiple-slave SNP-X session.
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. 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. 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. A maximum of two retries are permitted. A retry is caused by a NAK from from the remote SNP device.
0x290C	A received SNP message has been NAKed the maximum number of two times. The NAKed message may be retransmitted a maximum of two times.

PLC generated error codes for the GE 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

A

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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. 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. 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.
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.)

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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 CMMmodule 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.
0x510F	A framing or overrun error has occurred in a received X-Attach message.
0x520C	A BCC (Block Check Code) error has occurred on an X-Attach Response message when re-establishing an existing SNP-X communication session. Communications have not been established.
0x520F	A BCC (Block Check Code) error has occurred in a received X-Attach message.

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

A

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
0x530C	An invalid message type was received when an X-Attach Response was required when re-establishing an existing SNP-X communication session. 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. 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. 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. 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.

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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).
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.

PLC generated error codes for the GE Fanuc 90-30, 90-70 and VersaMax SNPX protocol continue on the next page.

GE SNPX Protocol – PLC Error Code Tables (cont'd)

PLC Errors for GE SNPX Protocol (Minor-Major) (cont'd)	
Panel Error Code P499 Hex Value	**Description**
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.
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 ***C-more*** Micro Panel Error Code Table shown on page A-3 can occur when using the Mitsubishi FX protocol, there are no PLC generated errors.

Mitsubishi Q / QnA Series – PLC Error Codes

The following table lists the errors that can be generated by the Mitsubisht Q / QnA Series PLC when using the Q / QnA protocol.

NOTE: *The following errors can be generated from the designated PLC, are monitored by the* ***C-more*** *Micro 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 Mitsubishi Q / QnA and Q Series	
Panel Error Code P499 Hex Value	**Description**
0x4000	Serial communications checksum error. Check cable and grounding.
0x4001	Unsupported request sent to PLC.
0x4002	Unsupported request sent to PLC.
0x4003	Global request sent to PLC that cannot be executed.
0x4004	System protect switch is on and request was sent that cannot be executed. Also PLC, may still be booting up.
0x4005	Packet sent is too large according to size request in header.
0x4006	Serial communications could not be initialized.
0x4008	CPU busy or buffer full.
0x4010	Request cannot be serviced while CPU is running. CPU must be stopped.
0x4013	Request cannot be serviced while CPU is running. CPU must be stopped.
0x4021	Drive memory does not exist.
0x4022	File (ZR memory) does not exist.
0x4023	File (ZR memory) name and File (ZR memory) number do not match.
0x4024	File (ZR memory) inaccessible by user.
0x4025	File (ZR memory) is locked by another device.
0x4026	File (ZR memory) password required.
0x4027	Specified range is out of File (ZR memory) range.
0x4028	File (ZR memory) already exist.
0x4029	Specified File (ZR memory) capacity cannot be retrieved.
0x402A	Specified File (ZR memory) is abnormal.
0x402B	The requested data cannot be executed in the specified drive memory.
0x402C	The requested operation cannot be executed presently.
0x4030	The specified data type does not exist. Check the CPUs allowable data types.
0x4031	The specified address is out of range. The data type requested may need to be expanded in GX developer. The CPU may not allow this data type.
0x4032	Address qualification is incorrect.
0x4033	Cannot write to system area.
0x4034	Request cannot be executed because completion address for an instruction cannot be turned on.

PLC generated error codes for the Mitsubishi Q / QnA protocol continue on the next page.

A

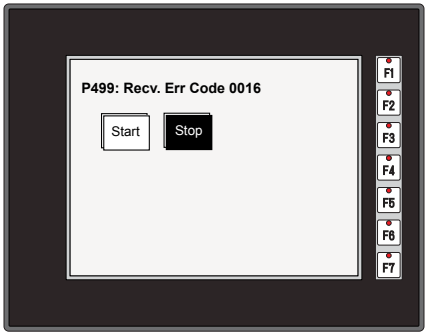
Mitsubishi Q / QnA Series – PLC Error Codes (cont'd)

PLC Error Codes for Mitsubishi Q / QnA and Q Series	
Panel Error Code P499 Hex Value	**Description**
0x4040	Module doesn't support request.
0x4041	Request is out of module's range.
0x4042	Module cannot be accessed.
0x4043	Address for specified module is incorrect.
0x4044	Hardware problem exist for specified module.
0x4050	Request cannot be executed because memory card protect switch is on.
0x4051	Specified memory cannot be accessed.
0x4052	Specified memory attribute is read only and cannot be written to.
0x4053	Error occurred when writing to specified memory location.
0x4080	Request data error. Check cabling and electrical noise.
0x4082	Specified request is already being executed.
0x408B	The remote request cannot be performed.
0x40A0	A block number out of range was specified.
0x40A1	The number of blocks requested exceeds the range of the PLC.
0x40A2	A step number was specified out of range.
0x40A3	Step range limit exceeded.
0x40A4	Specified sequence step number is out of range.
0x40A5	Specified SFC device is out of range.
0x40A6	Block specification and step specification are incorrect.
0x4100	CPU module hardware fault.
0x4101	Serial communication connection incorrect.
0x4105	CPU module internal memory fault. Bad CPU.
0x4106	CPU is in initialization. Wait until CPU is booted up.
0x4107	Specified function not supported by this CPU. Check memory types for that CPU.
0x4110	Specified function not supported because CPU is in Stop. Put CPU in Run.
0x4111	System is not up yet. Wait until system is up before performing request.
0x4A01	The network number specified does not exist. Routing not supported in ***C-more.***
0x4A02	Station number specified does not exist. Routing not supported in ***C-more.***

Omron Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 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 Omron Host Link communication protocols breakdown into a four digit hexadecimal value.

Omron Error Code P499 Message Example:



A

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*** *Micro 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 P499 Hex Value	**Description**
0x00	Normal Completion.
0x01	Not executable in RUN mode.
0x02	Not executable in MONITOR mode.
0x03	Not executable with PROM mounted.
0x04	Address over (data overflow).
0x0B	Not executable in PROGRAM mode.
0x0C	Not executable in DEBUG mode.
0x0D	Not executable in LOCAL mode.
0x10	Parity error.
0x11	Framing error.
0x12	Overrun.
0x13	FCS error.
0x14	Format error (parameter length error).
0x15	Entry number data error (parameter error, data code error, data length error).
0x16	Instruction not found.
0x18	Frame length error.
0x19	Not executable (due to Un-executable error clear, non-registration of I/O table, etc.).
0x20	I/O table generation impossible (unrecognized remote I/O unit, channel over, duplication of optical transmitting I/O unit).
0xA0	Abort due to parity error in transmit data under process.
0xA1	Abort due to framing error in transmit data under process.
0xA2	Abort due to overrun in transmit data under process.
0xA3	Abort due to FCS error in transmit data under process.
0xA4	Abort due to format error in transmit data under process.
0xA5	Abort due to frame length error in transmit data under process.
0xA8	Abort due to entry number data error in transmit data under process.
0xB0	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*** *Micro 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 P499 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.

PLC generated error codes for the Omron FINS protocol continue on the next page.

A

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

PLC Error Codes for Omron FINS	
Panel Error Code P499 Hex Value	**Description**
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.
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.

PLC generated error codes for the Omron FINS protocol continue on the next page.

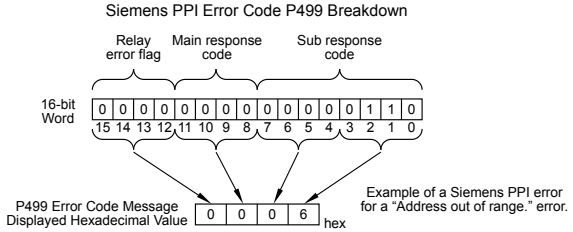
Omron FINS Protocol – PLC Error Code Table (cont'd)

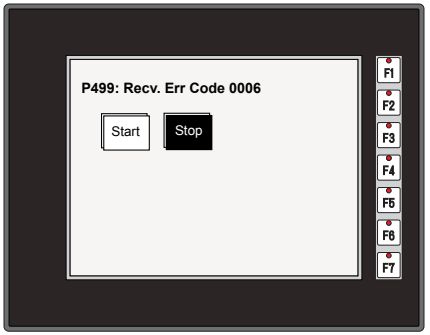
PLC Error Codes for Omron FINS	
Panel Error Code P499 Hex Value	**Description**
0x2507	Unit Error: I/O bus error.
0x2509	Unit Error: SYSMAC BUS/2 error.
0x250A	Unit Error: CPU Bus Unit Error.
0x250D	Unit Error: SYSMAC BUS No. duplication.
0x250F	Unit Error: Memory Error.
0x2510	Unit Error: SYSMAC BUS 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.

A

Siemens Error Code P499 Explanation

The P499 error code is used to show any errors that are generated by the connected PLC. The P499 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 diagram.





Siemens PPI Protocol – PLC Error Code Table

PLC PDU Header Errors for S7-200 PPI	
Panel Error Code P499 Hex Value	**Description**
0x0001	Hardware Fault.
0x0003	Object access not allowed.
0x0004	Context not supported.
0x0005	Address out of range.
0x0006	Address out of range.
0x0007	Write Data size mismatch.
0x000A	Object 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.