Danload 6000 Electronic Preset

Connector Configuration Parameters

Resync Time X10ms

Modbus RTUmessages use a 3.5 character "silent" time for message framing. Entering a number in this field will override the 3.5 character time to the time value entered here times 10 msec.

RTS ON DelayX10ms

Enter a number from 0 to 255 (0 to 2.55 seconds) to delay sending a message after turning on Request To Send (RTS). Commonly used with modem communication to allow additional time for the modems to synchronize.

RTS OFF DelayX10ms

Enter a number from 0 to 255 (0 to 2.55 seconds) to keep RTS on after a message has been sent. Commonly used to keep a radio on for a short period of time at the end of a message.

Handshake Option

If Full Handshake is selected the Omnii-Comm will assert RTS and wait for CTS before sending a message. RTS will be turned off after the message has been sent. If Constant Carrier is selected the Omnii-Comm will assert RTS when it sends its first message and leave it asserted. It will wait for CTS before sending. If Ignore CTS is selected, RTS will be asserted before sending a message and removed at the end of the message. The CTS input will be ignored. If No Handshake is selected, RTS will be asserted when the Omnii-Comm sends its first message. RTS will not be turned off at the end of the message. The CTS input will be ignored. If Activity Monitor is selected, the Omnii-Comm will check the DCD input before sending a message. If DCD is ON, the Omnii-Comm will delay sending the message.

Retry Count

The number of times a message will be retried before an error is reported

Option Bit Parameters

Use Radio Key

If checked, Bit 0 in a register specified by the "Radio Key Address" on the Header configuration screen will be turned ON before a message is sent and turned OFF after the message has been completed.

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Protocol Extension Table Parameters

Enable the Extension Table and click on the Edit Ext Table button to edit the Protocol Extension Table for Danload 6000. You must use the Extension Table even if you do not plan to do any commands. The Danload Protocol Extension Table fields are:

CMD Flag Data Type and Flag Offset

The first two fields define the data type and starting offset that will be used to store the Command Flags. The Command Flags are monitored by the Omnii-Comm and when the state changes from OFF to ON, a command is built using information read from the Command Data words. For Danload 6000 protocol there are 8 words of Command Flags. The least significant 8 bits of each word are used to trigger the commands. The most significant bits of each word is used to signal the command completion.

Word 0

Bit	Function
0	FC01 Prompt Recipe
1	FC02 Request Selected Recipe
2	FC03 Prompt Additives
3	FC04 Request Selected Additives
4	FC05 Time Out Operation
5	FC06 Authorize Transaction
6	FC07 End Transaction
7	FC08 Prompt Preset Volume

Word 1

Bit	Function
0	FC09 Request Preset Volume
1	FC0A Authorize Batch
2	FC0B Not Implemented Set Densities/Gravity
3	FC0C Not Implemented Set Temps
4	FC0D End Batch
5	FC0E Start Batch
6	FC0F Stop Batch
7	FC10 Batch Data by Component

Word 2

Bit	Function
0	FC11 Additive Totalizers
1	FC12 Request Status
2	FC13 Clear Status
3	FC14 Reset Primary Alarms
4	FC15 Not Implemented Meter Totalizers
5	FC16 Not Implemented Component Totalizers
6	FC17 Not Implemented Unauthorized Flow
7	FC18 Not Implemented Data Code Value

Word 3

Bit	Function
0	FC19 Request Meter Values
1	FC1A Not Implemented Request Component
2	FC1B Request Power Fail Date and Time
3	FC1C Display Message
4	FC1D Request Keypad Data
5	FC1E Reque4st Transaction Storage Status
6	FC1F Not Implemented Request Data by Component
7	FC20 Initialize Transaction

Word 4

Bit	Function
0	FC21 Start Communication
1	FC22 Request Program Code Values
2	FC23 Set Program Code Value
3	FC24 Modify Program Code Attribute
4	FC25 Request Value Changed
5	FC26 Clear Value Changed
6	FC27 Configure Recipe
7	FC28 Get Date and Time

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Word 5

Bit	Function
0	FC29 Not Implemented Set Date and Time
1	FC2A Not Implemented Request Firmware
2	FC2B Read Input
3	FC2C Write Output
4	FC2D Not Implemented DUART Diagnostic
5	FC2E Not Implemented ARCNET Diagnostic
6	FC2F Not Implemented Request Crash Data
7	FC30 Reset Unit

Word 6

Bit	Function
0	FC31 Last key Pressed
1	FC32 Not Implemented RAM Tests
2	FC33 Swing Arm Side
3	FC34 Installed Boards
4	FC35 Not Implemented Configure
5	FC36 Weights and Measures Switch
6	FC37 Change Operating Mode
7	FC38 Clear Display

Word 7

Bit	Function
0	FC39 Request Stored Transaction
1	FC3A Request Stored Batch
2	FC3B Enhanced Start Communication
3	FC3C Enhanced Request Status
4	Not Used
5	Not Used
6	Not Used
7	Not Used

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CMD Data Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information required to build a command. The Command Data should be set up before setting the Command Trigger Flag ON. Danload 6000 requires 151 words of Command Data.

Word	Function
0	Danload Address
1	Timeout
2	I/O Point Type
3	I/O Point Number
4	I/O Point Value
5	Recipe Number
6	Additive Selection Method; Additive Selection Bitmap
7	Swing Arm Side; Number Data Prompts
8-9	Data Item 1
10-11	Data Item 2
12-13	Data Item 3
14-15	Data Item 4
16-17	Data Item 5
18-19	Suggested Preset Volume
20-21	Override Maximum Preset Value
22	Number of Components
23	Use G/D Bit Map (2 bits per component)
24-25	G/D 1
26-27	G/D 2
28-29	G/D 3
30-31	G/D 4
32	Temp 1
33	Temp 2
34	Temp 3
35	Temp 4
36-37	Status Clear Mask
38	Alarm Clear Mask bits 79-64
39	Alarm Clear Makt bits 63-48
40	Alarm Clear Mask bits 47-32
41	Alarm Clear Mask bits 31-16
42	Alarm Clear Mask bits 15-0
43	Data Code
44	Meter Number
45	Component Number
46	Message to Display Byte Count
47-110	Message to Display (128 characters max)
111	Prompt Field Width
112	Input Control
113	Transaction Number
114	Start Program Code Number
115	Stop Program Code Number
116	Program Code Length
117-125	Program Code Value
126	Program Code Attribute
127	Program Code State
128-136	Recipe Name (17 Characters, Null Terminated)
137	Component Percentage 1
138	Component Percentage 2
139	Component Percentage 3
140	Component Percentage 4
141	Component Sequence 1
142	Component Sequence 2
143	Component Sequence 3
144	Component Sequence 4
145	Year; Month
146	Day; Hours
147	Minutes; Seconds
148	Operating Mode
149	Request Transaction Number
150	Request Batch Number

FC10 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC10, Batch Data By Component Command. 108 words are required

FC11 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC11, Additive Totalizers Command. 13 words are required

FC3C Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC3C, Enhanced Request Status Command. 29 words are required

FC21 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC21, Start Communications Command. 12 words are required

FC28, 2A, 2B and 31 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC28, Get Date and Time Command; FC2A Request Firmware Command; FC2B Read Input Command; FC31Last Key Pressed Command 16 words are required

FC09 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC09, Request Preset Volume Command. 2 words are required

FC19 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC19, Request Meter Values Command. 38 words are required

FC39 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC39, Request Stored Transaction Command. The number of words required is determined by the format of the Transaction.

FC3A Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC3A, Request Stored Batch Command. The number of words required is determined by the format of the Batch report

FC15-FC18 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC15 Meter Totalizer Command; FC16 Component Totalizers Command; FC17 Unauthorized Flow Command; FC18 Data Code Value Command; 53 words are required

FC22 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC22, Request Program Code Values Command. The number of words required is determined by the Start and Stop Program Code Numbers as defined in the Command Data

FC25 Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC25, Request Value Changed Command. 62 words are required

FC1A Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC1A, RequestComponent Command. 16 words are required

FC1F Data Type and Starting Offset

These two fields are used to specify what Data Type and Starting Offset will be used to store the information returned by a FC1F, Request Data by Component Command. 57 words are required

Poll Table Read Parameters

DL6000 Address

The address of the Danload that data will be read from.

Function

The type of data that will be read. Valid selections are Read AdditiveTotalizers (FC11), Request Status (FC12), Request Meter Values (FC19), Read Input (FC2B) and Enhanced Request Status (FC3C)

Point Type FC2B

The point type if using FC2B, Read Input. Choices are Meter, RTD, Current Loop or Discrete

Point Number FC2B

The point number to read, needed only for Read Input function.

Meter # (1-4) FC19

The meter number to read for FC19, Request Meter Values.

Bytes Expected

The total number of bytes expected from the read operation.

Poll Table Write and Error Parameters

Danload 6000 write functions are not supported from the poll table. Use Commands to write.

Note: System Error Protocol Definitions are the same as Poll Table Write and Error Parameters

Database Extension Table Parameters

Index	Name	Size:Max Length
0	Type 00	2:256
1	Type 01	2:256
2	Type 02	2:256
3	Type 03	2:256
4	Type 04	2:256
5	Type 05	2:256
6	Type 06	2:256
7	Type 07	2:32
8	Type 08	2:32
9	Type 09	2:32
10	Type 10	2:64
11	Type 11	2:32
12	Type 12	2:32
13	Type 13	2:32
14	Type 14	2:32
15	Type 15	2:32
16	Type 16	2:32
17	Type 17	2:32
18	Type 18	2:32
19	Type 19	2:32
20	Type 20	2:256
21	Type 21	2:256