

**ID:** megeath\_G\_E8\_V003  
**Filename:** megeath\_G\_E8.xml  
**Road name:** ATSF  
**Road number:** 84  
**Manufacturer:** ARISTOCRAFT  
**Owner:** MEGEATH  
**Model:** E8 W/MARS LIGHT  
**DCC Address:** 84  
**Comment:** 1130 hrs Sunday 5-aug-07;  
**Decoder Model:** BLI E8/E9 w/Mars  
**Decoder Family:** QSI Diesel Ver. 7

**BASIC**

<i>Field</i>	<i>Setting</i>
Primary Address (CV1)	84
Address Format (CV29)	One byte (short) address
Extended Address (CV17)	0
Consist Address (CV19)	0
Locomotive Direction (CV29)	normal
FL Location (CV29)	28/128 speed step format
Power Source Conversion (CV29)	DC conversion enabled
Manufacturer ID (CV8)	113
Manufacturer Version No (CV7)	7
Product number (CV56)	3

**MOTOR**

<i>Field</i>	<i>Setting</i>
Acceleration Rate (CV3)	12
Deceleration Rate (CV4)	6

**SPEED CONTROL**

<i>Field</i>	<i>Setting</i>
Speed Table Definition (CV29)	Use Straight-Line Response
Vstart (CV2)	38
Max Volts (CV5)	1
Forward Trim (CV66)	100
Reverse Trim (CV95)	174
Quantum Speed Table (CV25)	Linear Curve
Speed Table (CV67)	0, 9, 18, 28, 37, 47, 56, 66, 75, 85, 94, 103, 113, 122, 132, 141, 151, 160, 170, 179, 188, 198, 207, 217, 226, 236, 245, 255

**FUNCTION MAP**

<i>Field</i>	<i>Setting</i>
FL(f) controls output 1 (CV33)	Yes
FL(f) controls output 2 (CV33)	Yes

FL(f) controls output 3 (CV33)	No
FL(f) controls output 4 (CV33)	No
FL(f) controls output 5 (CV33)	No
FL(f) controls output 6 (CV33)	No
FL(f) controls output 7 (CV33)	No
FL(f) controls output 8 (CV33)	No
FL(r) controls output 1 (CV34)	Yes
FL(r) controls output 2 (CV34)	Yes
FL(r) controls output 3 (CV34)	No
FL(r) controls output 4 (CV34)	No
FL(r) controls output 5 (CV34)	No
FL(r) controls output 6 (CV34)	No
FL(r) controls output 7 (CV34)	No
FL(r) controls output 8 (CV34)	No
F1 controls output 1 (CV35)	No
F1 controls output 2 (CV35)	No
F1 controls output 3 (CV35)	Yes
F1 controls output 4 (CV35)	No
F1 controls output 5 (CV35)	No
F1 controls output 6 (CV35)	No
F1 controls output 7 (CV35)	No
F1 controls output 8 (CV35)	No
F2 controls output 1 (CV36)	No
F2 controls output 2 (CV36)	No
F2 controls output 3 (CV36)	No
F2 controls output 4 (CV36)	Yes
F2 controls output 5 (CV36)	No
F2 controls output 6 (CV36)	No
F2 controls output 7 (CV36)	No
F2 controls output 8 (CV36)	No
F3 controls output 1 (CV37)	No
F3 controls output 2 (CV37)	No
F3 controls output 3 (CV37)	No
F3 controls output 4 (CV37)	No
F3 controls output 5 (CV37)	Yes
F3 controls output 6 (CV37)	No
F3 controls output 7 (CV37)	No
F3 controls output 8 (CV37)	No
F4 controls output 4 (CV38)	No
F4 controls output 5 (CV38)	No
F4 controls output 6 (CV38)	Yes
F4 controls output 7 (CV38)	No
F4 controls output 8 (CV38)	No
F4 controls output 9 (CV38)	No
F4 controls output 10 (CV38)	No
F4 controls output 11 (CV38)	No
F5 controls output 4 (CV39)	No
F5 controls output 5 (CV39)	No
F5 controls output 6 (CV39)	No
F5 controls output 7 (CV39)	Yes
F5 controls output 8 (CV39)	No

F5 controls output 9 (CV39)	No
F5 controls output 10 (CV39)	No
F5 controls output 11 (CV39)	No
F6 controls output 4 (CV40)	No
F6 controls output 5 (CV40)	No
F6 controls output 6 (CV40)	No
F6 controls output 7 (CV40)	No
F6 controls output 8 (CV40)	Yes
F6 controls output 9 (CV40)	No
F6 controls output 10 (CV40)	No
F6 controls output 11 (CV40)	No
F7 controls output 4 (CV41)	No
F7 controls output 5 (CV41)	No
F7 controls output 6 (CV41)	No
F7 controls output 7 (CV41)	No
F7 controls output 8 (CV41)	No
F7 controls output 9 (CV41)	Yes
F7 controls output 10 (CV41)	No
F7 controls output 11 (CV41)	No
F8 controls output 4 (CV42)	No
F8 controls output 5 (CV42)	No
F8 controls output 6 (CV42)	No
F8 controls output 7 (CV42)	No
F8 controls output 8 (CV42)	No
F8 controls output 9 (CV42)	No
F8 controls output 10 (CV42)	Yes
F8 controls output 11 (CV42)	No
F9 controls output 7 (CV43)	No
F9 controls output 8 (CV43)	No
F9 controls output 9 (CV43)	No
F9 controls output 10 (CV43)	No
F9 controls output 11 (CV43)	Yes
F9 controls output 12 (CV43)	No
F9 controls output 13 (CV43)	No
F9 controls output 14 (CV43)	No
F10 controls output 7 (CV44)	No
F10 controls output 8 (CV44)	No
F10 controls output 9 (CV44)	No
F10 controls output 10 (CV44)	No
F10 controls output 11 (CV44)	No
F10 controls output 12 (CV44)	Yes
F10 controls output 13 (CV44)	No
F10 controls output 14 (CV44)	No
F11 controls output 7 (CV45)	No
F11 controls output 8 (CV45)	No
F11 controls output 9 (CV45)	No
F11 controls output 10 (CV45)	No
F11 controls output 11 (CV45)	No
F11 controls output 12 (CV45)	No
F11 controls output 13 (CV45)	Yes
F11 controls output 14 (CV45)	No

F12 controls output 7 (CV46)	No
F12 controls output 8 (CV46)	No
F12 controls output 9 (CV46)	No
F12 controls output 10 (CV46)	No
F12 controls output 11 (CV46)	No
F12 controls output 12 (CV46)	No
F12 controls output 13 (CV46)	No
F12 controls output 14 (CV46)	Yes

**ANALOG CONTROLS**

<b>Field</b>	<b>Setting</b>
Power Source Conversion (CV29)	DC conversion enabled

**CONSIST**

<b>Field</b>	<b>Setting</b>
Consist Address (CV19)	0
Consist Direction (CV19)	Normal
Acceleration Adjustment (CV23)	0
Acceleration Adjustment Sign (CV23)	Adjustment Added
Deceleration Adjustment (CV24)	0
Deceleration Adjustment Sign (CV24)	Adjustment Added
Consist Address Active For FL in Forward (CV22)	Locomotive Address Only
Consist Address Active For FL in Reverse (CV22)	Locomotive Address Only
Consist Address Active For F1 (CV21)	Locomotive Address Only
Consist Address Active For F2 (CV21)	Locomotive Address Only
Consist Address Active For F3 (CV21)	Locomotive Address Only
Consist Address Active For F4 (CV21)	Locomotive Address Only
Consist Address Active For F5 (CV21)	Locomotive Address Only
Consist Address Active For F6 (CV21)	Locomotive Address Only
Consist Address Active For F7 (CV21)	Locomotive Address Only
Consist Address Active For F8 (CV21)	Locomotive Address Only
Consist Address Active For F9 (CV22)	Locomotive Address Only
Consist Address Active For F10 (CV22)	Locomotive Address Only
Consist Address Active For F11 (CV22)	Locomotive Address Only
Consist Address Active For F12 (CV22)	Locomotive Address Only

**ADVANCED**

<b>Field</b>	<b>Setting</b>
Packet Time-out Value (CV11)	0

**CVS**

<b>Value</b>		<b>Value</b>		<b>Value</b>		<b>Value</b>	
<b>CV</b>	<b>Dec Hex</b>	<b>CV</b>	<b>Dec Hex</b>	<b>CV</b>	<b>Dec Hex</b>	<b>CV</b>	<b>Dec Hex</b>
1	84 54	29	6 06	64	0 00	81	132 84
2	38 26	33	3 03	66	100 64	82	141 8D
3	12 0C	34	3 03	67	0 00	83	151 97
4	6 06	35	4 04	68	9 09	84	160 A0
5	1 01	36	8 08	69	18 12	85	170 AA
7	7 07	37	16 10	70	28 1C	86	179 B3
8	113 71	38	4 04	71	37 25	87	188 BC
11	0 00	39	8 08	72	47 2F	88	198 C6
17	192 C0	40	16 10	73	56 38	89	207 CF
18	0 00	41	32 20	74	66 42	90	217 D9
19	0 00	42	64 40	75	75 4B	91	226 E2
21	0 00	43	16 10	76	85 55	92	236 EC
22	0 00	44	32 20	77	94 5E	93	245 F5
23	0 00	45	64 40	78	103 67	94	255 FF
24	0 00	46	128 80	79	113 71	95	174 AE
25	2 02	62	0 00	80	122 7A		

**SOUND / VOLUME CONTROL**

<b>Field</b>	<b>Setting</b>
System Volume (CV51)	83
Mute Volume (CV51)	17
Horn Triggered Doppler (CV51)	Yes
Bell Select (CV55)	1
Sounds on Power Up (CV56)	When a valid DCC ops packet to locomotive address received
Horn (CV52)	5
Bell (CV52)	11
Motor (CV52)	11
Air Pump (CV52)	6
Cooling Fan (CV52)	8
Long Air Let-off (CV52)	9
Short Air Let-off (CV52)	10
Squealing Brakes (CV52)	10
Dynamic Brakes (CV52)	10
Coupler Sounds (CV52)	8
Air Brakes (CV52)	9

**FUNCTION OUTPUT**

<b>Field</b>	<b>Setting</b>
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Output 1 - Forward/Reverse Only (CV53)	Multiple Automatic Lights #1
Output 2 - Forward/Reverse Only (CV53)	Multiple Automatic Lights #1
Output 3 - Forward/Reverse Only (CV53)	Multiple Automatic Lights #1
Output 4 - Forward/Reverse Only (CV53)	Horn
Output 5 - Forward/Reverse Only (CV53)	Coupler Effect
Output 6 - Forward/Reverse Only (CV53)	Cooling Fans
Output 7 - Forward/Reverse Only (CV53)	Dynamic Brakes
Output 8 - Forward/Reverse Only (CV53)	Doppler Shift
Output 9 - Forward/Reverse Only (CV53)	Squealing Brakes + Air Brakes
Output 10 - Forward/Reverse Only (CV53)	Mute
Output 11 - Forward/Reverse Only (CV53)	Heavy Load
Output 12 - Forward/Reverse Only (CV53)	Status Report
Output 13 - Forward/Reverse Only (CV53)	Standard/Alt Horn Selection
Output 14 - Forward/Reverse Only (CV53)	Multiple Automatic Lights #3
- Neutral Only (CV53)	Multiple Automatic Lights #1
- Neutral Only (CV53)	Multiple Automatic Lights #1
- Neutral Only (CV53)	Bell
- Neutral Only (CV53)	Horn
- Neutral Only (CV53)	Coupler Effect
- Neutral Only (CV53)	Cooling Fans
- Neutral Only (CV53)	Dynamic Brakes
- Neutral Only (CV53)	Dynamic Brakes
- Neutral Only (CV53)	Long Air Let-off
- Neutral Only (CV53)	Long Air Let-off
- Neutral Only (CV53)	Shut Down
- Neutral Only (CV53)	Status Report
- Neutral Only (CV53)	Standard/Alt Horn Selection
- Neutral Only (CV53)	Multiple Automatic Lights #3
Status Report Config MPH (CV55)	On
Status Report Config BEMF (CV55)	Off
Status Report Config PWM (CV55)	Off
Units (CV56)	Imperial

**LIGHT CONTROL**

<b>Field</b>	<b>Setting</b>
Headlight Initial State (CV55)	Automatic

Auto Headlight Config FWD (CV55)	Bright
Auto Headlight Config NFF (CV55)	Dim
Auto Headlight Config REV (CV55)	Dim
Auto Headlight Config NFR (CV55)	Dim
Headlight Dim Intensity (CV55)	32
Reverse Light Initial State (CV55)	Automatic
Auto Reverse Light Config FWD (CV55)	Dim
Auto Reverse Light Config NFF (CV55)	Dim
Auto Reverse Light Config REV (CV55)	Bright
Auto Reverse Light Config NFR (CV55)	Dim
Mars Light Initial State (CV55)	Automatic
Auto Mars Light Config FWD (CV55)	Strobe
Auto Mars Light Config NFF (CV55)	Dim
Auto Mars Light Config REV (CV55)	Dim
Auto Mars Light Config NFR (CV55)	Dim
Front Number Board Lights Initial State (CV55)	Automatic
Auto Front Number Board Lights Config FWD (CV55)	On
Auto Front Number Board Lights Config NFF (CV55)	On
Auto Front Number Board Lights Config REV (CV55)	On
Auto Front Number Board Lights Config NFR (CV55)	On

**MULTI AUTO LIGHTS**

<b>Field</b>	<b>Setting</b>
Headlight (CV55)	On
Rear Light (CV55)	On
Mars Light (CV55)	On
Ditch Lights (CV55)	On
Front Number Board Lights (CV55)	Off
Rear Number Board Lights (CV55)	Off
Front Marker Lights (CV55)	Off
Rear Marker Lights (CV55)	Off
Front Step Lights (CV55)	Off
Rear Step Lights (CV55)	Off
Rear Cab Lights (CV55)	Off
Rear Cab Lights (CV55)	Off
Multi Auto Lights 2, Headlight (CV55)	Off
Multi Auto Lights 2, Rear Light (CV55)	Off
Multi Auto Lights 2, Mars Light (CV55)	Off

Multi Auto Lights 2, Ditch Lights (CV55)	Off
Multi Auto Lights 2, Front Number Board Lights (CV55)	On
Multi Auto Lights 2, Rear Number Board Lights (CV55)	On
Multi Auto Lights 2, Front Marker Lights (CV55)	On
Multi Auto Lights 2, Rear Marker Lights (CV55)	On
Multi Auto Lights 2, Front Step Lights (CV55)	On
Multi Auto Lights 2, Rear Step Lights (CV55)	On
Multi Auto Lights 2, Rear Cab Lights (CV55)	Off
Multi Auto Lights 2, Rear Cab Lights (CV55)	Off
Multi Auto Lights 3, Headlight (CV55)	Off
Multi Auto Lights 3, Rear Light (CV55)	Off
Multi Auto Lights 3, Mars Light (CV55)	Off
Multi Auto Lights 3, Ditch Lights (CV55)	Off
Multi Auto Lights 3, Front Number Board Lights (CV55)	Off
Multi Auto Lights 3, Rear Number Board Lights (CV55)	Off
Multi Auto Lights 3, Front Marker Lights (CV55)	Off
Multi Auto Lights 3, Rear Marker Lights (CV55)	Off
Multi Auto Lights 3, Front Step Lights (CV55)	Off
Multi Auto Lights 3, Rear Step Lights (CV55)	Off
Multi Auto Lights 3, Rear Cab Lights (CV55)	On
Multi Auto Lights 3, Rear Cab Lights (CV55)	On

**BEMF**

<b>Field</b>	<b>Setting</b>
Very Low Speed Proportional Gain (CV56)	10
Very Low Speed Differential Gain (CV56)	15
Low Speed Proportional Gain (CV56)	10

Low Speed Differential Gain (CV56)	20
Medium Speed Proportional Gain (CV56)	10
Medium Speed Differential Gain (CV56)	20
High Speed Proportional Gain (CV56)	10
High Speed Differential Gain (CV56)	20
RTC Minimum BEMF (CV56)	2

**QSI MISC.**

<b>Field</b>	<b>Setting</b>
Hardware Profile (CV56)	15
Minor Version Number (CV56)	0
Firmware Build Number (CV56)	45
Firmware Build Date.Month (CV56)	7
Firmware Build Date.Day (CV56)	23
Firmware Build Date.Year (CV56)	7
Sound Set Number (CV56)	0
Throttle Mode (CV56)	Regulated Throttle Control
Programming Verbal Acknowledgement (CV62)	Disable
Verbal CV Inquiry (CV64)	0