

J1939 LP30 LINEAR SENSOR - STATUS Message 65450

MESSAGE PARAMETERS

This message is transmitted by sensor at REP Rate

PGN: 65450 (FFAA hex)	
Transmission Repetition Rate	50ms
Data Length	8 bytes
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	170 (AA hex)
Priority	4
Source Address	214 (D6 hex)
Communication Bit Rate	250 K bits/sec

PART NUMBERS

5 pin M12	LP30-A-1939-M12
4 pin DT04	LP30-A-1939-DE4
6 pin DT04	LP30-A-1939-DE6
Flying Lead	LP30-A-1939-SCXX
<i>For flying lead replace XX with desired length in inches</i>	
<i>For high corrosive applications use stainless steel housing. Add modifier 53 to end of Joral P/N for stainless steel housing.</i>	

CONNECTIONS / WIRING

Signal	M12 5 pin	DE4	DE6
V+	1	3 RED	3 RED
Common	2	4 BLACK	4 BLACK
CANH	3	1 YELLOW	1 YELLOW
CANL	4	2 GREEN	2 GREEN
SA Select	5		5 WHITE
Common			6 BLACK

SOURCE ADDRESS SELECTION

Value (ohms)	Address	PGN
No Resistor	214	65450
590 (id-tag 1)	215	65450
976 (id-tag 2)	216	65450
1500 (id-tag 3)	217	65450
2260 (id-tag 4)	218	65450
3400 (id-tag 5)	219	65450
5360 (id-tag 6)	220	65450
9530 (id-tag 7)	221	65450

8 BYTE / 64 BIT DATA FIELD BIT POSITIONS

BYTE	BIT	BIT FUNCTION	FIELD DESCRIPTION	
BYTE 1	1	SPEED Setting LSB	SPEED Setting (2 bits) 00 = Slow; 01 = Medium; 10 = Fast	
	2	SPEED Setting MSB		
	3	DIRECTION Setting LSB	DIRECTION Setting (2 bits) 00 = FWD direction counts up; 01 = REV direction counts up	
	4	DIRECTION Setting MSB		
	5	SAVE CNT Setting LSB	SAVE COUNT Setting (2 bits) At power : 00 = Counter resets to 0; 01 = Counter will start from last saved count	
	6	SAVE CNT Setting MSB		
	7	SAVE ON SPEED LSB	SAVE ON ZERO SPEED Setting (2 bits) 00 = Do not save count on speed becoming 0; 01 = Save count when speed becomes 0	
	8	SAVE ON SPEED MSB		
BYTE 2	9	unused	NOTE: Set reserved and unused bits to all 0's or all 1's	
	10	unused		
	11	unused		
	12	unused		
	13	REV direction Flag LSB		REV DIRECTION (2 bits) 01 means counting down
14	REV direction Flag MSB			
BYTE 3	15	FWD direction Flag LSB	FWD DIRECTION (2 bits) 01 means counting up	
	16	FWD direction Flag MSB		
	17	SPEED bit0 LSB	SPEED (10 bits) Speed in inches per second, 0.5" per second per bit, 0 to 1000 (0.25" per bit per second if 1/4" resolution option is installed) SPEED is calculated by running average on 100msec intervals 00 (slow) averages 3 seconds of counts per calculation 01 (medium) averages 1 second of counts per calculation 02 (fast) averages 100 msecs of counts per calculation	
18	SPEED bit1			
19	SPEED bit2			
20	SPEED bit3			
21	SPEED bit4			
22	SPEED bit5			
23	SPEED bit6			
24	SPEED bit7			
25	SPEED bit8			
26	SPEED bit9 MSB			
BYTE 4	27	unused	POSITIVE COUNT Flag (2 bits) 01 means count is positive	
	28	unused		
	29	POS Count Flag LSB		
	30	POS Count Flag MSB		
	31	NEG Count LSB		NEGATIVE COUNT Flag (2 bits) 01 means count is negative
	32	NEG Count MSB		
	BYTE 5	33		Count bit0 LSB
34		Count bit1		
35		Count bit2		
36		Count bit3		
37		Count bit4		
38		Count bit5		
39		Count bit6		
40		Count bit7		
BYTE 6		41	Count bit8	
		42	Count bit9	
		43	Count bit10	
		44	Count bit11	
	45	Count bit12		
	46	Count bit13		
	47	Count bit14		
	48	Count bit15		
	BYTE 7	49	Count bit16	
		50	Count bit17	
		51	Count bit18	
		52	Count bit19	
		53	Count bit20	
		54	Count bit21	
		55	Count bit22	
		56	Count bit23	
BYTE 8		57	Count bit24	
		58	Count bit25	
		59	Count bit26	
		60	Count bit27	
		61	Count bit28	
		62	Count bit29	
		63	Count bit30	
		64	Count bit31 MSB	



J1939 LP30 LINEAR SENSOR - SETTING Message 65449

MESSAGE PARAMETERS

This message is transmitted by the controller

PGN: 65449 (FFA9 hex)	
Transmission Repetition Rate	50 ms
Data Length	8 bytes
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	169 (A9 hex)
Priority	4
Source Address	214 (D6 hex)
Communication Bit Rate	250 K bits/sec

CONNECTIONS / WIRING

Signal	M12 5 pin	DE4	DE6
V+	1	3 RED	3 RED
Common	2	4 BLACK	4 BLACK
CANH	3	1 YELLOW	1 YELLOW
CANL	4	2 GREEN	2 GREEN
SA Select	5		5 WHITE
Common			6 BLACK

SOURCE ADDRESS SELECTION

Value (ohms)	Address	PGN
No Resistor	214	65449
590 (id-tag 1)	215	65449
976 (id-tag 2)	216	65449
1500 (id-tag 3)	217	65449
2260 (id-tag 4)	218	65449
3400 (id-tag 5)	219	65449
5360 (id-tag 6)	220	65449
9530 (id-tag 7)	221	65449

8 BYTE / 64 BIT DATA FIELD BIT POSITIONS

BYTE	BIT	BIT FUNCTION	FIELD DESCRIPTION
BYTE 1	1	SPEED Setting LSB	SPEED Settings (2 bits) 00 = Slow; 01 = Medium; 10 = Fast
	2	SPEED Setting MSB	
	3	DIRECTION Setting LSB	DIRECTION Setting (2 bits) 00 = CW direction counts up; 01 = CCW direction counts up
	4	DIRECTION Setting MSB	
	5	SAVE CNT Setting LSB	SAVE COUNT Setting (2 bits) At power : 00 = Counter resets to 0; 01 = Counter will start from last saved count
	6	SAVE CNT Setting MSB	
	7	SAVE ON SPEED LSB	SAVE ON ZERO SPEED Setting (2 bits) 00 = Do not save count on speed becoming 0; 01 = Save count when speed becomes 0
	8	SAVE ON SPEED MSB	
BYTE 2	9	unused	NOTE: Set reserved and unused bits to all 0's or all 1's
	10	unused	
	11	unused	
	12	unused	
	13	unused	
	14	unused	
	15	unused	
	16	unused	
BYTE 3	17	unused	
	18	unused	
	19	unused	
	20	unused	
	21	unused	
	22	unused	
	23	unused	
	24	unused	
BYTE 4	25	unused	
	26	unused	
	27	unused	
	28	unused	
	29	unused	
	30	unused	
	31	unused	
	32	unused	
BYTE 5	33	unused	
	34	unused	
	35	unused	
	36	unused	
	37	unused	
	38	unused	
	39	unused	
	40	unused	
BYTE 6	41	unused	
	42	unused	
	43	unused	
	44	unused	
	45	unused	
	46	unused	
	47	unused	
	48	unused	
BYTE 7	49	unused	
	50	unused	
	51	unused	
	52	unused	
	53	unused	
	54	unused	
	55	unused	
	56	unused	
BYTE 8	57	unused	
	58	unused	
	59	unused	
	60	unused	
	61	unused	
	62	unused	
	63	unused	
	64	unused	



J1939 LP30 LINEAR SENSOR - SETTING Message 65451

MESSAGE PARAMETERS

This message is transmitted by the controller

PGN: 65451 (FBAB hex)	
Transmission Repetition Rate	n/a
Data Length	n/a
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	171 (AB hex)
Priority	X
Source Address	39 (27 hex)
Communication Bit Rate	250 K bits/sec

CONNECTIONS / WIRING

Signal	M12 5 pin	DE4	DE6
V+	1	3 RED	3 RED
Common	2	4 BLACK	4 BLACK
CANH	3	1 YELLOW	1 YELLOW
CANL	4	2 GREEN	2 GREEN
SA Select	5		5 WHITE
Common			6 BLACK

SOURCE ADDRESS SELECTION

Value (ohms)	Address	PGN
No Resistor	214	65451
590 (id-tag 1)	215	65452
976 (id-tag 2)	216	65453
1500 (id-tag 3)	217	65454
2260 (id-tag 4)	218	65455
3400 (id-tag 5)	219	65456
5360 (id-tag 6)	220	65457
9530 (id-tag 7)	221	65458

8 BYTE / 64 BIT DATA FIELD BIT POSITIONS

BYTE	BIT	BIT FUNCTION	FIELD DESCRIPTION
BYTE 1	1	RESET COUNT LSB	RESET COUNTER (2 bits) 01 = Reset counter to zero
	2	RESET COUNT MSB	
	3	reserved	
	4	reserved	
	5	RPM RATE LSB	RPM RATE (2 bits) 00 = Slow; 01 = Medium; 10 = Fast
	6	RPM RATE MSB	
	7	DIRECTION Setting LSB	DIRECTION (2 bits) 00 = FWD direction counts up; 01 = REV direction counts up
	8	DIRECTION Setting MSB	
BYTE 2	9	SAVE CNT Setting LSB	SAVE COUNT Setting (2 bits) At power : 00 = Counter resets to 0; 01 = Counter will start from last saved count
	10	SAVE CNT Setting MSB	
	11	CLEAR CNT Setting LSB	CLEAR COUNT (2 bits) 01 = Clear saved Count; If clear is the last saved sensor will start from 0
	12	CLEAR CNT Setting MSB	
	13	SAVE ON SPEED LSB	SAVE ON ZERO SPEED Setting (2 bits) 00 = Do not save count on speed becoming 0; 01 = Save count when speed becomes 0
	14	SAVE ON SPEED MSB	
	15	ENABLE STAT MSG LSB	ENABLE SETTING STATUS MESSAGE (2 bits) At power : 00 = Do not enable setting status message; 01 = Enable setting status msg 65449 for transmission
	16	ENABLE STAT MSG MSB	
BYTE 3	17	unused	NOTE: Set reserved and unused bits to all 0's or all 1's
	18	unused	
	19	unused	
	20	unused	
	21	unused	
	22	unused	
	23	unused	
	24	unused	
BYTE 4	25	unused	
	26	unused	
	27	unused	
	28	unused	
	29	unused	
	30	unused	
	31	unused	
	32	unused	
BYTE 5	33	unused	
	34	unused	
	35	unused	
	36	unused	
	37	unused	
	38	unused	
	39	unused	
	40	unused	
BYTE 6	41	unused	
	42	unused	
	43	unused	
	44	unused	
	45	unused	
	46	unused	
	47	unused	
	48	unused	
BYTE 7	49	unused	
	50	unused	
	51	unused	
	52	unused	
	53	unused	
	54	unused	
	55	unused	
	56	unused	
BYTE 8	57	unused	
	58	unused	
	59	unused	
	60	unused	
	61	unused	
	62	unused	
	63	unused	
	64	unused	

