

Joral J1939 Dual 3-Axis Incline Sensor MASTER Status Message 65467

Date : 08 Nov 2011

MESSAGE PARAMETERS	
This message is transmitted by sensor at Rep Rate	
PGN: 65467 (FFBB hex)	
Transmission Repetition Rate	50ms
Data Length	8 bytes
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	187 (BB hex)
Priority	4
Source Address	219 (DB hex)
Communication Bit Rate	250 K bits/sec

Source Address Selection		
Resistor Value (ohms)	Address	PGN
No Resistor Connected	219	65467
590 ohms (Id-tag 1)	220	65467
976 ohms (Id-tag 2)	221	65467
1500 ohms (Id-tag 3)	222	65467
2260 ohms (Id-tag 4)	223	65467
3400 ohms (Id-tag 5)	224	65467
5360 ohms (Id-tag 6)	225	65467
9530 ohms (Id-tag 7)	226	65467

Connections / Wiring			
Signal	M12 Pin#	DT04-4P	DT04-6P
V+	1	3 (RED)	3 (RED)
Common	3	4 (BLACK)	4 (BLACK)
CANH	2	1 (YELLOW)	1 (YELLOW)
CANL	4	2 (GREEN)	2 (GREEN)
SA Select	5		5 (WHITE)
Common			6 (BLACK)

PART NUMBERS	
5 Pin M12	DINC-1939-5M12-03-0
DT04-4P	DINC-1939-DT04-03-0
DT04-6P	DINC-1939-DT06-03-0
Flying Leads	DINC-1939-5C72-03-0

8 Byte / 64 Bit Data Field Bit Positions				
Byte	Bit	Bit Function	Field Description	
B y t e 1	1	X Angle bit0 LSB	MASTER X ANGLE (10 bits) 0 to 1000, 0.1 deg per bit	
	2	X Angle bit1		
	3	X Angle bit2		
	4	X Angle bit3		
	5	X Angle bit4		
	6	X Angle bit5		
	7	X Angle bit6		
	8	X Angle bit7		
B y t e 2	9	X Angle bit8		X ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle
	10	X Angle bit9 MSB		
	11	X Positive Flag LSB	X ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle	
	12	X Positive Flag MSB		
	13	X Negative Flag LSB	MASTER Y ANGLE (10 bits) 0 to 1000, 0.1 deg per bit	
	14	X Negative Flag MSB		
	B y t e 3	15	Y Angle bit0 LSB	Y ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle
		16	Y Angle bit1	
17		Y Angle bit2		
18		Y Angle bit3		
19		Y Angle bit4		
20		Y Angle bit5		
21		Y Angle bit6		
22		Y Angle bit7		
B y t e 4	23	Y Angle bit8	Y ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle	
	24	Y Angle bit9 MSB		
	25	Y Positive Flag LSB	MASTER Z ANGLE (10 bits) 0 to 1000, 0.1 deg per bit	
	26	Y Positive Flag MSB		
	27	Y Negative Flag LSB	Z ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle	
	28	Y Negative Flag MSB		
	B y t e 5	29	Z Angle bit0 LSB	Z ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle
		30	Z Angle bit1	
31		Z Angle bit2		
32		Z Angle bit3		
33		Z Angle bit4		
34		Z Angle bit5		
35		Z Angle bit6		
36		Z Angle bit7		
B y t e 6	37	Z Angle bit8	SENSITIVITY Setting (3 bits) Field contains the value of the current setting 0 = most sensitive, 7 = most sluggish (default=4)	
	38	Z Angle bit9 MSB		
	39	Z Positive Flag LSB	LED WEIGHT Setting (3 bits) Field contains the value of the current setting Degrees per LED Indicator, 1 to 7 (default=1)	
	40	Z Positive Flag MSB		
	B y t e 7	41	Z Negative Flag LSB	unused
		42	Z Negative Flag MSB	
		43	unused	unused
		44	unused	
45		unused	unused	
46		unused		
47		unused	unused	
48		unused		
B y t e 8	49	unused	unused	
	50	unused		
	51	unused	unused	
	52	unused		
	53	unused	unused	
	54	unused		
	55	unused	unused	
	56	unused		
B y t e 8	57	Sensitivity bit0 LSB	unused	
	58	Sensitivity bit1		
	59	Sensitivity bit2 MSB	unused	
	60	LED Weight bit0 LSB		
	61	LED Weight bit1	unused	
	62	LED Weight bit2 MSB		
	63	unused	unused	
	64	unused		

Joral J1939 Dual 3-Axis Incline Sensor SLAVE Status Message 65466

Date : 08 Nov 2011

MESSAGE PARAMETERS	
This message is transmitted by sensor at Rep Rate	
PGN: 65466 (FFBA hex)	
Transmission Repetition Rate	50ms
Data Length	8 bytes
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	186 (BA hex)
Priority	4
Source Address	219 (DB hex)
Communication Bit Rate	250 K bits/sec

Source Address Selection		
Resistor Value (ohms)	Address	PGN
No Resistor Connected	219	65466
590 ohms (Id-tag 1)	220	65466
976 ohms (Id-tag 2)	221	65466
1500 ohms (Id-tag 3)	222	65466
2260 ohms (Id-tag 4)	223	65466
3400 ohms (Id-tag 5)	224	65466
5360 ohms (Id-tag 6)	225	65466
9530 ohms (Id-tag 7)	226	65466

8 Byte / 64 Bit Data Field Bit Positions			
Byte	Bit	Bit Function	Field Description
B y t e 1	1	X Angle bit0 LSB	SLAVE X ANGLE (10 bits) 0 to 1000, 0.1 deg per bit
	2	X Angle bit1	
	3	X Angle bit2	
	4	X Angle bit3	
	5	X Angle bit4	
	6	X Angle bit5	
	7	X Angle bit6	
	8	X Angle bit7	
B y t e 2	9	X Angle bit8	
	10	X Angle bit9 MSB	
	11	X Positive Flag LSB	X ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle
	12	X Positive Flag MSB	
	13	X Negative Flag LSB	X ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle
	14	X Negative Flag MSB	
B y t e 3	15	Y Angle bit0 LSB	SLAVE Y ANGLE (10 bits) 0 to 1000, 0.1 deg per bit
	16	Y Angle bit1	
	17	Y Angle bit2	
	18	Y Angle bit3	
	19	Y Angle bit4	
	20	Y Angle bit5	
	21	Y Angle bit6	
	22	Y Angle bit7	
	23	Y Angle bit8	
	24	Y Angle bit9 MSB	
B y t e 4	25	Y Positive Flag LSB	Y ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle
	26	Y Positive Flag MSB	
	27	Y Negative Flag LSB	Y ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle
	28	Y Negative Flag MSB	
	29	Z Angle bit0 LSB	SLAVE Z ANGLE (10 bits) 0 to 1000, 0.1 deg per bit
	30	Z Angle bit1	
	31	Z Angle bit2	
	32	Z Angle bit3	
33	Z Angle bit4		
34	Z Angle bit5		
35	Z Angle bit6		
36	Z Angle bit7		
37	Z Angle bit8		
38	Z Angle bit9 MSB		
B y t e 5	39	Z Positive Flag LSB	Z ANGLE POS SIGN FLAG (2 bits) 01 = Positive Angle
	40	Z Positive Flag MSB	
B y t e 6	41	Z Negative Flag LSB	Z ANGLE NEGATIVE SIGN FLAG (2 bits) 01 = Negative Angle
	42	Z Negative Flag MSB	
	43	unused	
	44	unused	
	45	unused	
	46	unused	
	47	unused	
	48	unused	
B y t e 7	49	unused	
	50	unused	
	51	unused	
	52	unused	
	53	unused	
	54	unused	
	55	unused	
	56	unused	
B y t e 8	57	unused	
	58	unused	
	59	unused	
	60	unused	
	61	unused	
	62	unused	
	63	unused	
	64	unused	

Joral J1939 Dual 3-Axis Incline Sensor SETTING Message 65290

Date : 08 Nov 2011

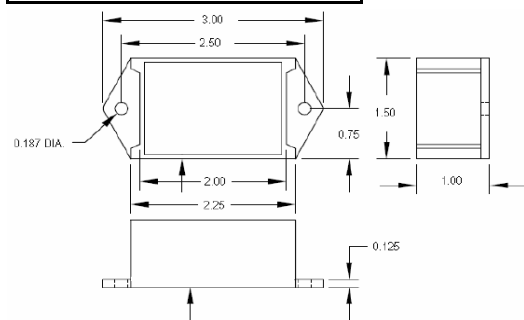
MESSAGE PARAMETERS	
This message is transmitted by the controller	
PGN: 65290 (FF0A hex)	
Transmission Repetition Rate	n/a
Data Length	n/a
Data Page	0
PDU Format	255 (FF hex)
PDU Specific	10 (0A hex)
Priority	7
Source Address	249 (F9 hex)
Communication Bit Rate	250 K bits/sec

NOTE: SOURCE ADDRESS AND PRIORITY CHANGED 08 NOV 2011

Source Address Selection		
Resistor Value (ohms)	Address	PGN
No Resistor Connected	219	65290
590 ohms (Id-tag 1)	220	65291
976 ohms (Id-tag 2)	221	65292
1500 ohms (Id-tag 3)	222	65293
2260 ohms (Id-tag 4)	223	65294
3400 ohms (Id-tag 5)	224	65295
5360 ohms (Id-tag 6)	225	65296
9530 ohms (Id-tag 7)	226	65297

SPECIFICATIONS
Power 6 to 30 VDC (95 milliamps)
Weight: Master - 3 oz; Slave - 2 oz
Mounting Tabs (0.187 diameter holes)
Resolution 0.1 degrees
Absolute Accuracy (at 25 C) ± 0.3 degrees
Temperature Drift ± 0.3 degrees over range
Operating Temperature -40 C to +85

HOUSING (Master and Slave)



8 Byte / 64 Bit Data Field Bit Positions				
Byte	Bit	Bit Function	Field Description	
B y t e 1	1	SENS Setting bit0 LSB	SENSITIVITY Setting (3 bits) 0 = most sensitive, 7 = most sluggish (default=4)	
	2	SENS Setting bit1		
	3	SENS Setting bit2 MSB		
	4	reserved	LED WEIGHT Setting (3 bits) Degrees per LED Indicator, 1 to 7 (default=1)	
	5	reserved		
	6	Direction Setting LSB		
	B y t e 2	7	Direction Setting LSB	
		8	Direction Setting MSB	
9		reserved		
10		reserved		
11		reserved		
12		reserved		
13		unused		
14		unused		
B y t e 3	15	unused		
	16	unused		
	17	unused		
	18	unused		
	19	unused		
	20	unused		
	21	unused		
	22	unused		
B y t e 4	23	unused		
	24	unused		
	25	unused		
	26	unused		
	27	unused		
	28	unused		
	29	unused		
	30	unused		
B y t e 5	31	unused		
	32	unused		
	33	unused		
	34	unused		
	35	unused		
	36	unused		
	37	unused		
	38	unused		
B y t e 6	39	unused		
	40	unused		
	41	unused		
	42	unused		
	43	unused		
	44	unused		
	45	unused		
	46	unused		
B y t e 7	47	unused		
	48	unused		
	49	unused		
	50	unused		
	51	unused		
	52	unused		
	53	unused		
	54	unused		
B y t e 8	55	unused		
	56	unused		
	57	unused		
	58	unused		
	59	unused		
	60	unused		
	61	unused		
	62	unused		
63	unused			
64	unused			

NOTE: Set reserved and unused bits to all 0's or all 1's