

REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE

J2 Power	Cable Spec.
PIN Description	Cable 1: System Power
1 Positive (+) Power 12-28 VDC 10Amp Circuit	12 AWG - 12/24 VDC
2 Power Ground (-)	

J1 Control Valves	Cable Spec.
PIN Description	Cable 3: Port Valve
1 Port Valve A Coil Power (VPA)	4 Wire Shielded Cable.
2 Port Valve A Coil Return (GND)	AWG 18 or bigger.
3 Port Valve B Coil Power (VPB)	
4 Port Valve B Coil Return (GND)	
5 Port Valve Cable Shield (GND)	
6 Starboard Valve A Coil Power (VSA)	Cable 4: Starboard Valve
7 Starboard Valve A Coil Return (GND)	4 Wire Shielded Cable.
8 Starboard Valve B Coil Power (VSB)	AWG 18 or bigger
9 Starboard Valve B Coil Return (GND)	
10 Starboard Valve Cable Shield (GND)	

J4 Alarm Sensors	Cable Spec.
PIN Description	Cable 5: Alarms
1 Low Oil Sensor Signal (LO)	18 AWG or larger for sense lines
2 Low Oil Sensor Return (GND)	
3 Over Temp Sensor Signal (OT)	
4 Over Temp Return (GND)	
5 Reverse Switch Signal (Rev)	Cable 6: Reverse Switch
6 Reverse Switch Return (Gnd)	AWG 18 or bigger.

J5 Fin SENSORS	Cable Spec.
PIN Description	Cable 7: Port Sensor
1 Port Sensor Power-Red (5V)	18 AWG or bigger 3 Wire with shield Connect shield to pin 2
2 Port Sensor Ground-Black (GND)	Cable 8: Stbd Sensor
3 Port Sensor Feedback-White (P S)	18 AWG or bigger 3 Wire with shield Connect shield to pin 5
4 Starboard Sensor Power-Red (5V)	
5 Starboard Sensor Ground-Black (Gnd)	
6 Starboard Sensor Feedback-White (S S)	

NOTE 1: Power supply to secondary screens must be done by jumpering to the J2 Power connector only.

FOR USE WITH BASE HARDWARE RC1006

J3 Enable	Cable Spec.
PIN Description	CABLE 2: 16 AWG or Bigger for Enable Valve
1 Enable Valve Power (System Voltage)	
2 Enable Valve Return	

J7 Display 1	Cable Spec.
PIN Description	Cable 9: Display Head
1 Display Head Power (24 VDC)	18 AWG - Two Twisted Pairs. Shielded.
2 Display Head Power Ground (Gnd)	
3 Display Head Comms Positive (485+)	
4 Display Head Comms Negative (485-)	

J9 Display 2	Cable Spec.
PIN Description	Cable 9: Display Head
1 See Note 1	18AWG - Two Twisted Pals, Shielded.
2 See Note 1	
3 485+	
4 485-	

J10 GPS Input	Cable Spec
Pin Description	Cable 10: GPS Single Twisted Pair with Shield 18 AWG
1 GPS RS485+	
2 GPS RS485-	
3 RS485 GND	

J12 GPS Input	Description
Pin	
1	RS-232 TDX (Not Connected)
2	RS-232 (RXD) - GPS Input
3	RS-232 Ground

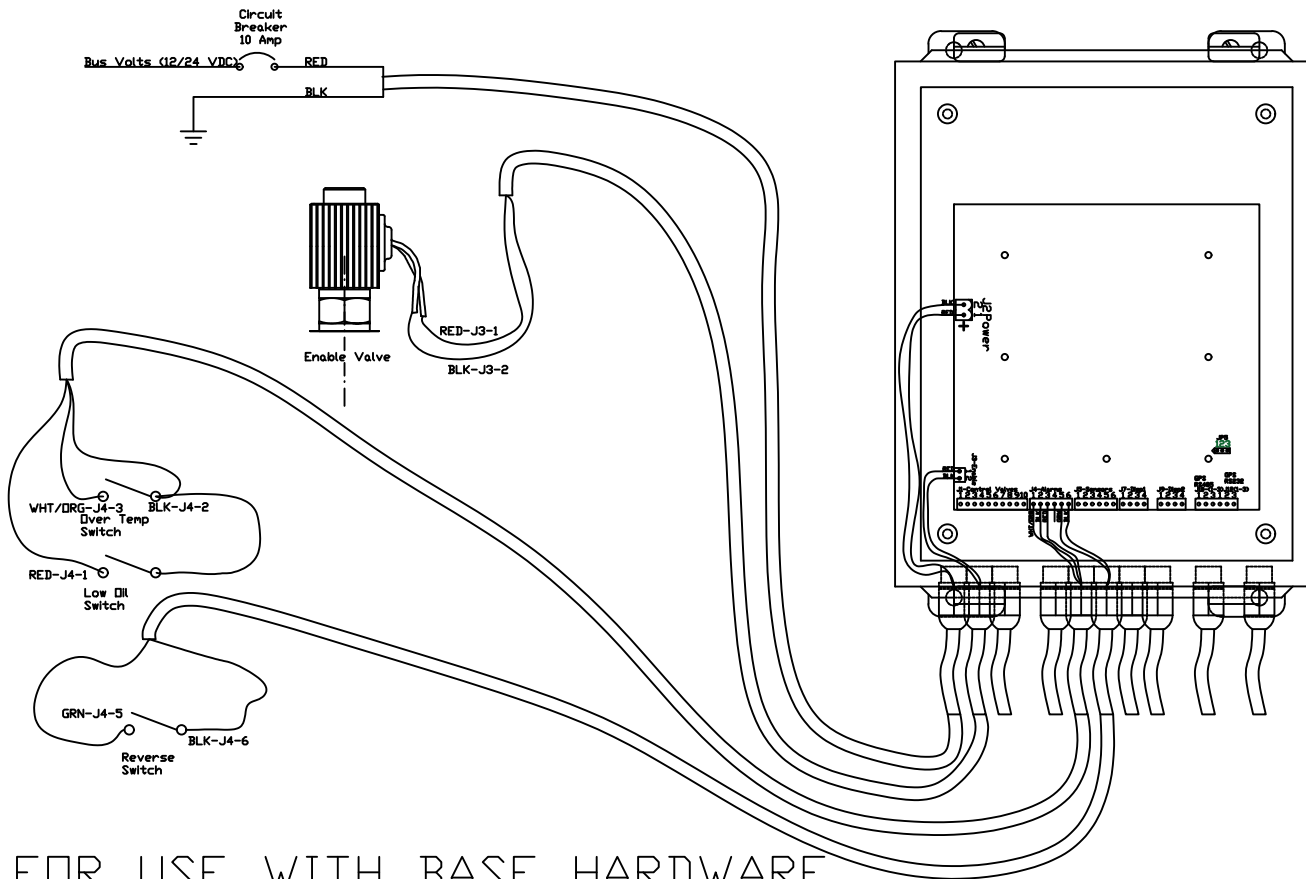
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	X.XX ± 0.13	.XXX ± 0.005
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N/A	DRAWN: TD	DATE:
	CHECKED: JD	DATE:
	APPROVED: KP	DATE:

ITEM	PART No	QTY	DESCRIPTION	REMARKS
StableMotion Controls Ltd. C/O Kobelt Manufacturing - 9238 129th Street Surrey, BC Canada V3W 0A6				
THIS DRAWING IS CONFIDENTIAL AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE COPIED OR SHOWN TO COMPANIES OR PERSONS WITHOUT THE WRITTEN CONSENT OF STABLEMOTION CONTROLS LTD.				
SCALE: NTS			TITLE	
WEIGHT: N/A			Roll Controller Wiring Diagram Wiring Tables	
DRAWING No.		SHEET No.		REV No.
B-RC-1006		1 of 7		A

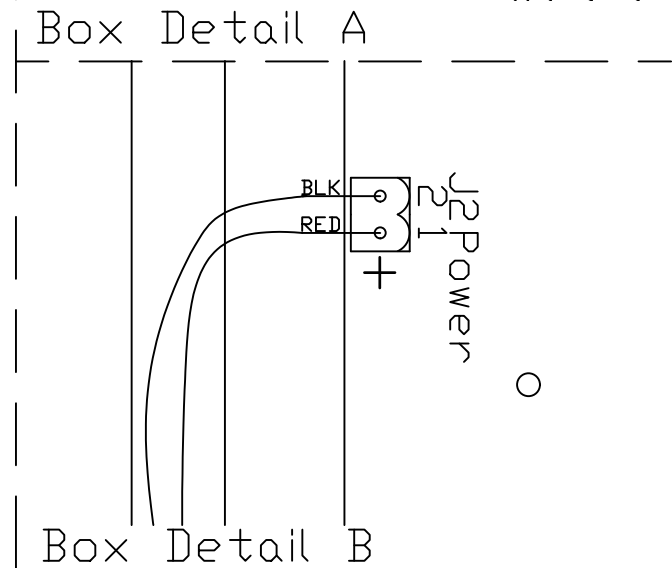
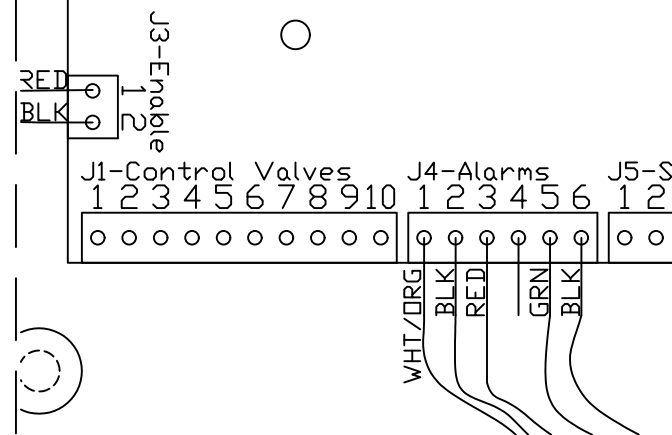
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MASTER BORDER: SM_LB

REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE



FOR USE WITH BASE HARDWARE
RC1006



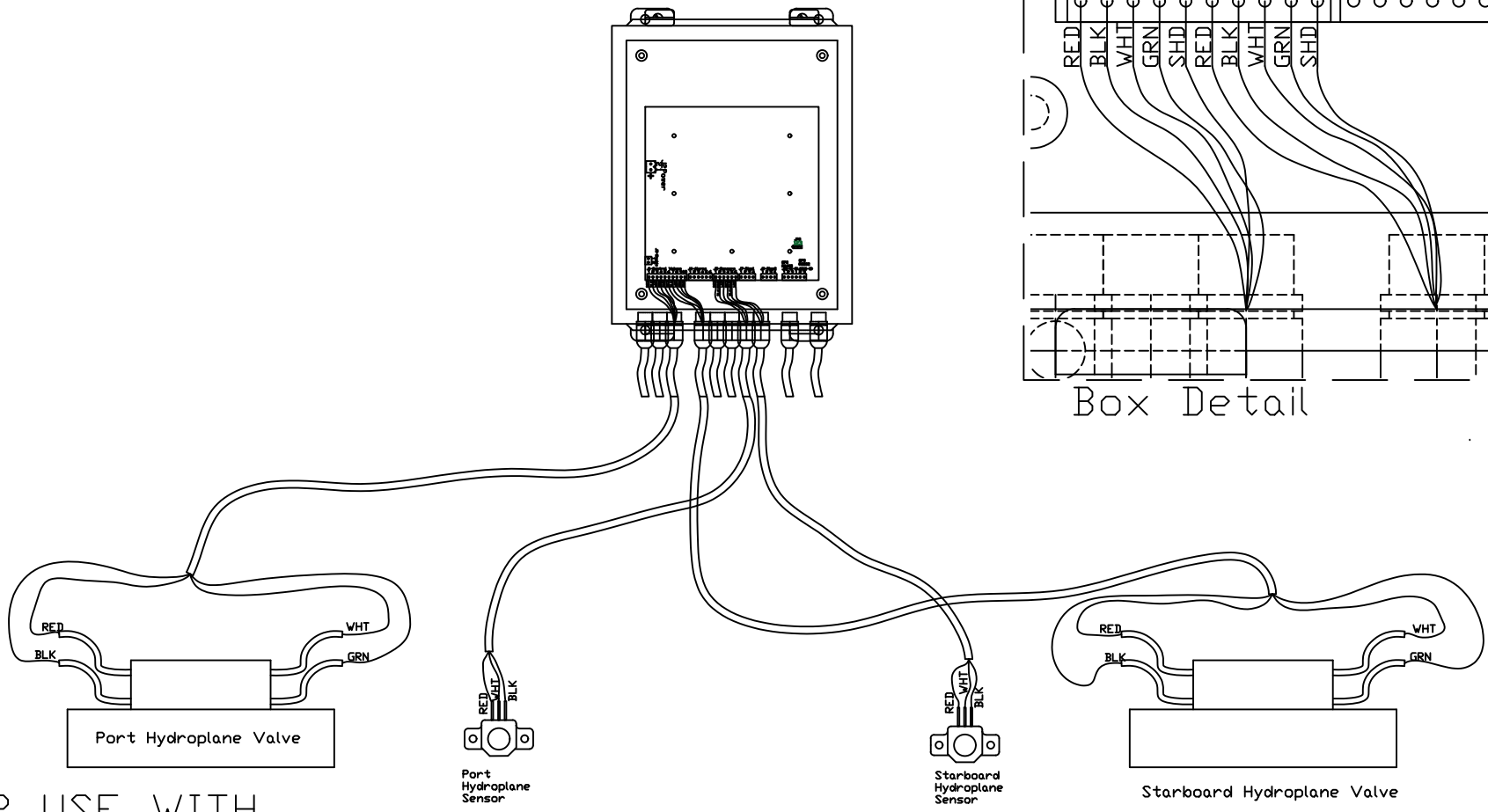
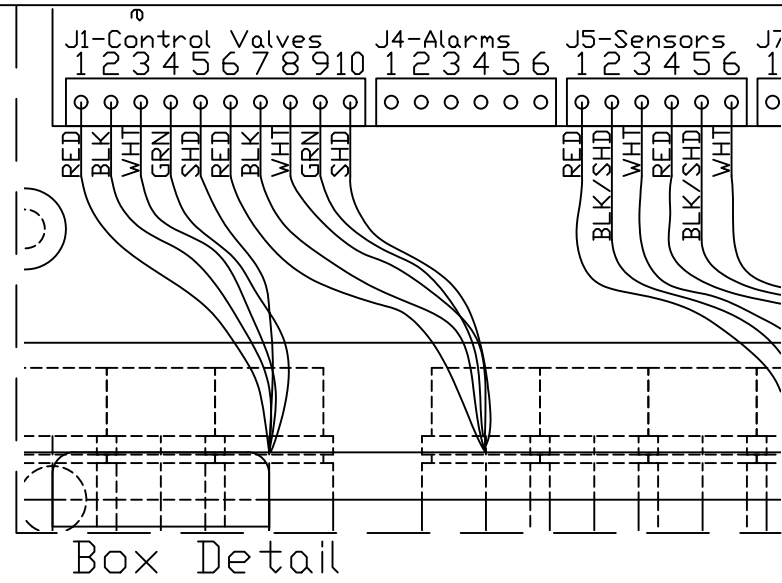
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ANGLES $\pm .5^\circ$	X.X ± 0.3	.XX ± 0.01
	X.XX ± 0.13	.XXX ± 0.005
SM NEXT ASSEMBLY	DESIGNED: DE	DATE:
N/A	DRAWN: TD	DATE:
	CHECKED: JD	DATE:
	APPROVED: KP	DATE:

ITEM	PART No	QTY	DESCRIPTION	REMARKS
StableMotion Controls Ltd. c/o Kobelt Manufacturing - 9238 129th Street Surrey, BC Canada V3W 0A6				
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DRAWING No.		SHEET No.	REV No.	
B-RC-1006		2 of 7	A	

CADD FILE No.: rc_1006_WiringDiagram_RC1006

MASTER BORDER: SM_B

REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE

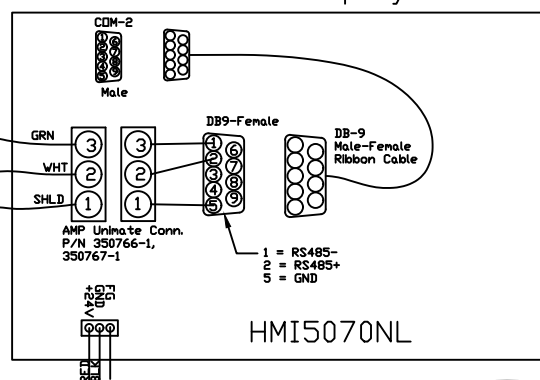


FOR USE WITH
BASE HARDWARE
RC1006

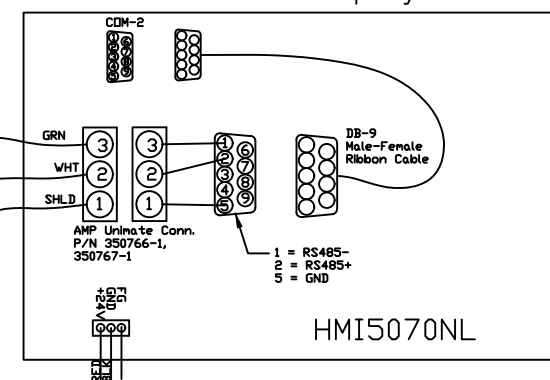
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MM	[INCHES]							
FRACTIONS ± 1/16	X ± 1	.X ± 0.03						
	X.X ± 0.3	.XX ± 0.01						
ANGLES ± .5°	X.XX ± 0.13	.XXX ± 0.005						
SM NEXT ASSEMBLY	DESIGNED: DE	DATE:	THIS DRAWING IS CONFIDENTIAL AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE COPIED OR SHOWN TO COMPANIES OR PERSONS WITHOUT THE WRITTEN CONSENT OF STABLEMOTION CONTROLS LTD.			SCALE: NTS	DRAWING No. B-RC-1006	
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	CHECKED: JD	DATE:						
	APPROVED: KP	DATE:						
			WEIGHT: N/A			SHEET No. 3 of 7		
						REV No. A		

FOR USE WITH BASE HARDWARE
RC1006

Display 1



Display 2



19 to 36VDC System supply

Power Supply 24VDC Out
Mean-Well P/N SD-25B-24
1A Max

9 to 18VDC System Supply

Power Supply 24VDC Out
Mean-Well P/N SD-25A-24
1A Max

Box Detail

StableMotion Controls Ltd.
C/O Kobelt Manufacturing - 9238 129th Street
Surrey, BC
Canada V3W 0A6

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SCALE: NTS

WEIGHT: N/A

TITLE
Roll Controller Wiring Diagram Display Head Connections

DRAWING No.
B-RC-1006

SHEET No.
4 of 7

REV No.
A

CADD FILE No.: rc_1004_RevE_WiringDiagram_RC1004

MASTER BORDER: SM_B

REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE

GPS/NAV Unit
RS-485/422

GPS Option A:
RS-485/422 Output Directly to Base Unit
Choose this option if possible
JP5 - Jumper Pins 2&3

WHT RS-485/422+
GRN RS-485/422-
SHLD GND

JP5
123

GPS RS232
GPS RS485
J10-(1-3) J12(1-3)
Disp2
2 3 4
1 2 3 1 2 3
O O O O O O

FOR USE WITH BASE HARDWARE
RC1006

ITEM	PART No	QTY	DESCRIPTION	REMARKS
StableMotion Controls Ltd. c/o Kobelt Manufacturing - 9238 129th Street Surrey, BC Canada V3W 0A6			TITLE Roll Controller Wiring Diagram GPS Option A Connections	
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WEIGHT: N/A			SHEET No. 5 OF 7	REV No. A

TOLERANCES: MM [INCHES]
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X.X ± 0.3 .XX ± 0.01
ANGLES $\pm .5^\circ$ X.XX ± 0.13 .XXX ± 0.005

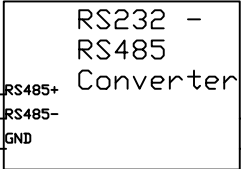
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CHECKED: JD	DATE:
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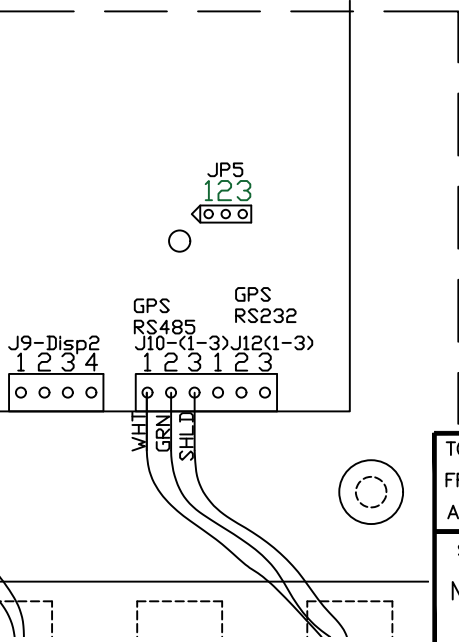
REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE

GPS/NAV Unit
Output RS232

GPS Option B:
GPS - Base cable run > 50ft (15m)
USE RS232-RS485 Converter mounted
near display unit
JP5 - Jumper Pins 1&2



NOTE: Consult
RS232-RS485
Converter
Manual for
Detail Wiring
Instructions



FOR USE WITH BASE HARDWARE RC1006

TOLERANCES:	MM	[INCHES]
FRACTIONS $\pm 1/16$	X ± 1	.X ± 0.03
	X.X ± 0.3	.XX ± 0.01
ANGLES $\pm .5^\circ$	X.XX ± 0.13	.XXX ± 0.005
SM NEXT ASSEMBLY	DESIGNED: DE	DATE:
N/A	DRAWN: TD	DATE:
	CHECKED: JD	DATE:
	APPROVED: KP	DATE:

ITEM	PART No	QTY	DESCRIPTION	REMARKS
StableMotion Controls Ltd. c/o Kobelt Manufacturing - 9238 129th Street Surrey, BC Canada V3W 0A6			TITLE Roll Controller Wiring Diagram GPS Option B Connections	
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WEIGHT: N/A			DRAWING No. B-RC-1006	SHEET No. 6 of 7
				REV No. A

REV. No.	ISSUED FOR	REVISION DESCRIPTION	DR.	CHK.	APP.	DATE

GPS/NAV Unit
Output RS232

GPS Option C:
GPS - Base cable run < 50ft (15m)
Connection via RS232 OK
JP5 - Jumper Pins 2&3

RXD
TXD
GND

WHT
GRN

JP5
123

1000

GPS RS485
J10-(1-3) J12(1-3)
1 2 3 1 2 3

FOR USE WITH BASE HARDWARE RC1006

9-Disp2
2 3 4

WHT
GRN

TOLERANCES:	MM	[INCHES]
FRACTIONS $\pm 1/16$	X ± 1	.X ± 0.03
	X.X ± 0.3	.XX ± 0.01
ANGLES $\pm .5^\circ$	X.XX ± 0.13	.XXX ± 0.005

SM NEXT ASSEMBLY

N/A

DESIGNED: DE	DATE:
DRAWN: TD	DATE:
CHECKED: JD	DATE:
APPROVED: KP	DATE:

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SCALE: NTS

WEIGHT: N/A

TITLE
Roll Controller Wiring Diagram
GPS Option C Connections

DRAWING No.
B-RC-1006

SHEET No.
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REV No.
A