

4

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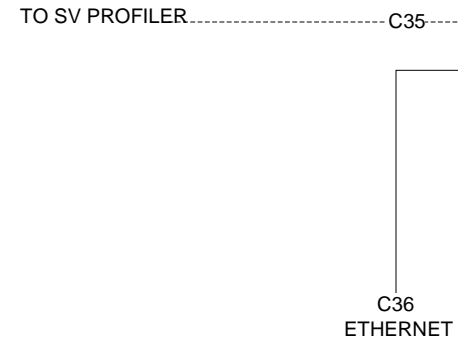
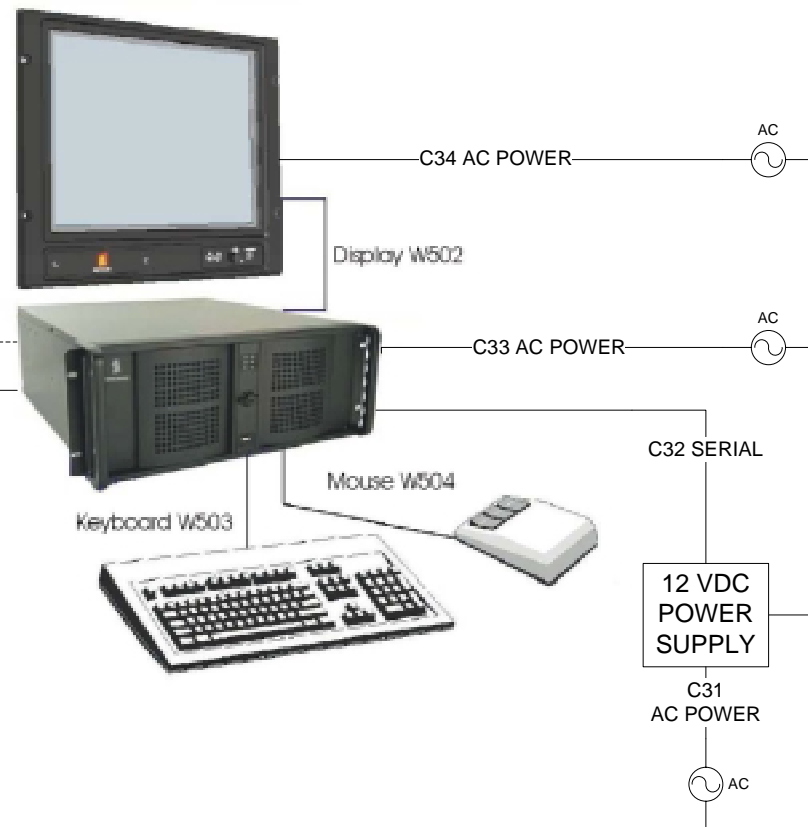
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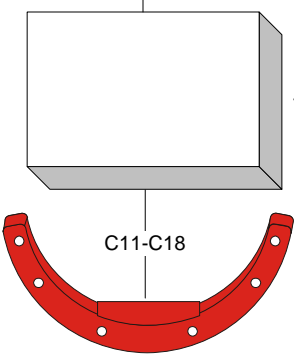
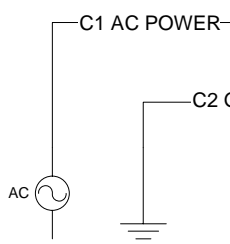
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HYDROGRAPHIC WORK STATION



EM 1002S TRANSCEIVER

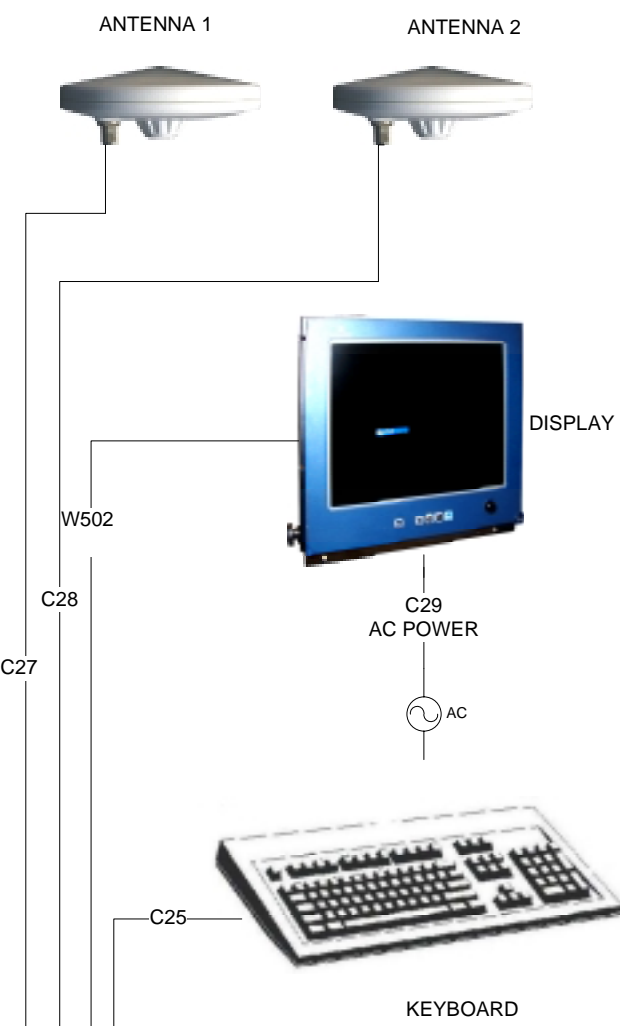
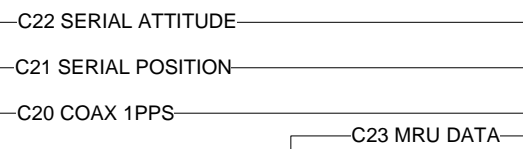



**PRELIMINARY**



Cable is 3 meters long, 12mm dia. Cable has factory installed connectors at both ends.

SEAPATH 200



CONTRACT NO. TDI Brooks		 <b>KONGSBERG</b> UNDERWATER TECHNOLOGY 19210 33 <sup>rd</sup> Avenue West Lynnwood, WA, USA 98036	
APPROVALS	DATE	TITLE	
DRAWN SM	8JUL05	EM 1002/ CABLE DIAGRAM	
CHECKED		SIZE	CAGE CODE
ENGINEER		B	1WUA6
		DWG NO.	REV.
		824-121529	
SCALE	UNIT WT	SHEET	1 OF 2
N/A	N/A		

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DWG NO. 824-121529 SH 2 REV.

Cable No.	From		To		Signal	Cable Type	Cable Description	Maximum Length (ft.)	Cable Supplied By
	Device	Connector	Device	Connector					
<b>EM1002S Transceiver</b>									
C1	EM 1002S Transceiver Unit	IEC Plug (Female)	Ship's Conditioned Power	TBD	230VAC 20 AMPS	LSTPS-3	3 Cond. Power Cable	20	CFE
C2	EM 1002S Transceiver Unit	Spade Lug	Ship's Ground	TBD	Ground	Supplied	Copper Braid	3	KUTI
C36	EM 1002S Transceiver Unit	RJ-45	HWS10 Workstation	RJ-45	10/100 Base T	LS4PR24-CAT-5	4-Pair Twisted	300	CFE
<b>Transducer J-Box</b>									
C3-C10	Transducer J-Box	DB50 (Male)	EM1002S Transceiver Unit	DB50 (Male)	Acoustic	Supplied	Transducer Cable	16.5	KUTI
C11-C18	Transducer J-Box	SMB	EM 1002S Transducer	Molded	Acoustic	Supplied	Transducer Cable	16.5	KUTI
<b>Position/ Attitude</b>									
C20	Seapath 200	BNC 1-PPS	EM1002 Transceiver Unit	BNC 1-PPS	1-PPS	RG58, M17/183-0001	COAX, 50 Ohm	100	CFE
C21	Seapath 200	DB9 (Female) Com5	EM1002 Transceiver Serial Port 1	DB9 (Female) Computer	Position (GGA), ZDA RS232	2XSO-3	TSP, 3 Pair, 22 AWG	100	CFE
C22	Seapath 200	DB9 (Female) Com6	EM1002 Transceiver Serial Port 2	DB9 (Female) Computer	Attitude RS232	2XSO-3	TSP, 3 Pair, 22 AWG	100	CFE
C23	Seapath 200	DB15 (Male)	MRU J-BOX	Terminal Block	MRU Data	2XSO-3	TSP, 3 Pair, 22 AWG	100	CFE
C24	Seapath 200	IEC Plug (Male)	Ship's Conditioned Power	IEC Plug (Female)	115VAC L,N,G	Molded Cable	Nema 5-15 IEC	12	KUTI
C25	Seapath 200	PS2	Keyboard	Molded	Keyboard	Manufacturer Supplied	Manufacturer Supplied	10	KUTI
W502	Seapath 200	HD15 (Video)	Monitor	HD15 (Video)	Seapath Video	Molded Cable	Manufacturer Supplied	6	KUTI
C27	Seapath 200	F Connector	GPS Antenna 1	F Connector	GPS	RG214 Hiflex	Manufacturer Supplied	65	KUTI
C28	Seapath 200	F Connector	GPS Antenna 2	F Connector	GPS	RG214 Hiflex	Manufacturer Supplied	65	KUTI
<b>HWS10 Workstation</b>									
C33	HWS10 Workstation	IEC Plug (Female)	Ship's Conditioned Power	IEC Plug (Male)	115VAC L,N,G	Manufacturer Supplied	Nema 5-15 IEC Detachable Cord	12	KUTI
W502	HWS10 Workstation	HD15 (Video)	Monitor	HD15 (Video)	Video	Molded Cable	Manufacturer Supplied	6	KUTI
W503	HWS10 Workstation	PS2	Keyboard	Molded	Keyboard	Molded Cable	Manufacturer Supplied	5	KUTI
W504	HWS10 Workstation	PS2	Mouse	Molded	Mouse	Molded Cable	Manufacturer Supplied	5	KUTI
C32	HWS10 Workstation	DB9 (Female)	12VDC Power Supply	DB9 (Female)	SSV RS232	2XSO-3	TSP, 3 Pair, 22 AWG	100	KUTI
<b>Misc</b>									
C34	HWS10 Workstation Monitor	IEC Plug (Female)	Ship's Conditioned Power	IEC Plug (Male)	115VAC L,N,G	Manufacturer Supplied	Nema 5-15 IEC Detachable Cord	12	KUTI
C35	SV Profiler	Molded Impulse	HWS10 Workstation Serial Port 2	DB9 (Female) "B"	RS232 Sound Velocity Profile	Manufacturer Supplied	Manufacturer Supplied	6	KUTI
C30	AMT Smart Sensor (SSV)	Molded 9 Pin	12VDC Power Supply	DB9 (Female)	SSV RS232	Manufacturer Supplied	Applied Microsystems Cable	100	KUTI
C31	12VDC Power Supply	Terminal Block	Ship's Conditioned Power	IEC Plug (Male)	115VAC L,N,G	Molded Cable	Nema 5-15 IEC	12	KUTI
C19	MRU 5	MS 26 Pin	MRU J-BOX	Terminal Block	MRU Data	Manufacturer Supplied	Manufacturer Supplied	100	KUTI
C29	Seapath Monitor	IEC Plug (Male)	Ship's Conditioned Power	IEC Plug (Male)	115VAC L,N,G	Manufacturer Supplied	Nema 5-15 IEC Detachable Cord	12	KUTI

NOTES:

- MCS: Multiconductor with 100% overshield
- TSP: Twisted shielded Pairs with 100% overshield, and at least 75% on individual pairs.
- All connectors refer to cable ends.
- Final cable type approval is the responsibility of owner
- CFE: Customer furnished equipment

APPROVALS		DATE	CONTRACT NO.		KONGSBERG MARITIME INC.	
SM		8JUL05	TDI BROOKS		19210 33 <sup>rd</sup> Avenue West KONGSBERG Lynnwood, WA, USA 98036	
DRAWN	SM	8JUL05	SIZE	CAGE CODE	DWG NO.	REV.
CHECKED	M RICE	8JUL05	B	1WUA6	824-121529	
ENGINEER			SCALE	UNIT WT	SHEET	2 OF 2
			N/A	N/A		

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