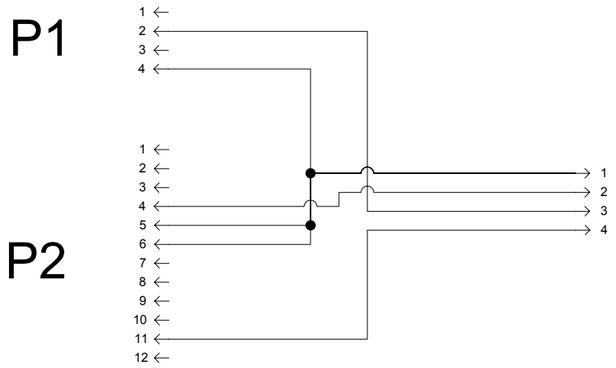
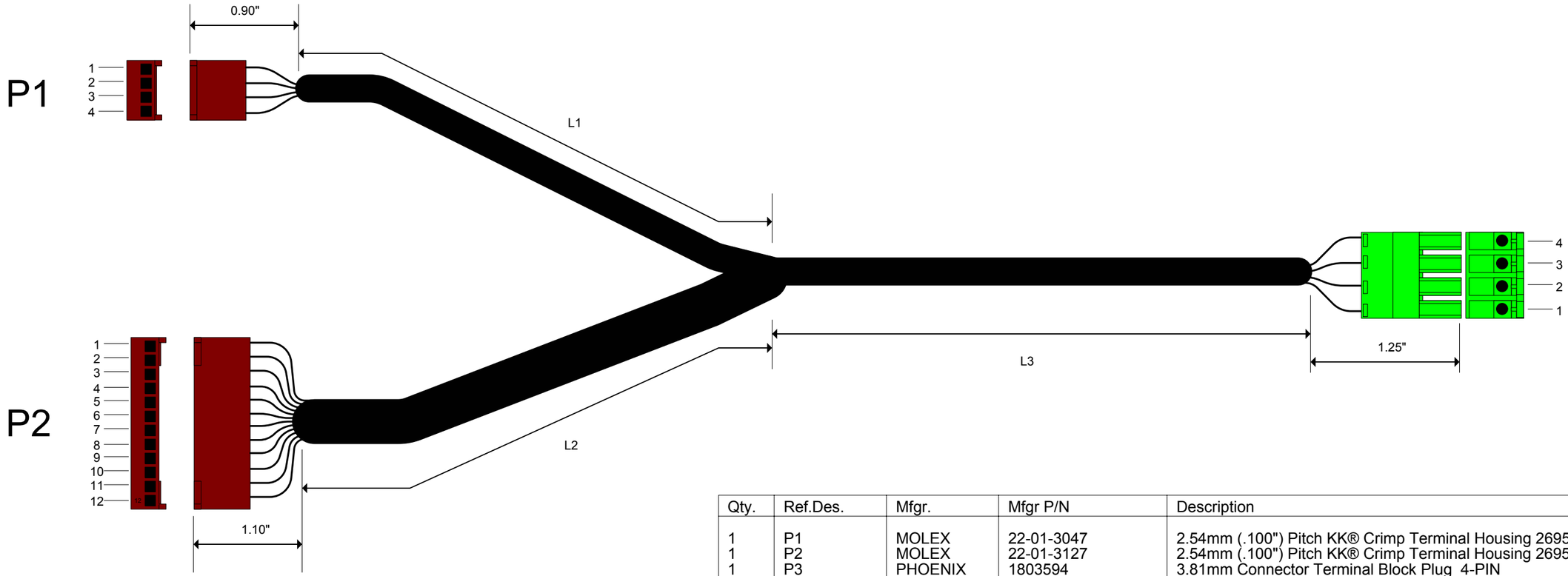


P3

P1 Pin	P2 Pin	P3 Pin	Size (AWG)	Color	Description
1	--	--	24	Red	--
2	--	3	24	White	Power
3	--	--	24	Green	--
4	--	1	24	Black	Ground
--	1	--	24	Brown	--
--	2	--	24	Red	--
--	3	--	24	Orange	--
--	4	2	24	Yellow	Backplane Tx
--	5	1	24	Green	Ground
--	6	1	24	Black	Ground
--	7	--	--	--	--
--	8	--	24	Dark Grey	--
--	9	--	24	Light Grey	--
--	10	--	24	Blue	--
--	11	4	24	Pink	Backplane Rx
--	12	--	24	Tan	--



Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	P1	MOLEX	22-01-3047	2.54mm (.100") Pitch KK® Crimp Terminal Housing 2695 4-pin Ribbed
1	P2	MOLEX	22-01-3127	2.54mm (.100") Pitch KK® Crimp Terminal Housing 2695 12-pin Ribbed
1	P3	PHOENIX	1803594	3.81mm Connector Terminal Block Plug 4-PIN
16	--	MOLEX	08-50-0114	Terminal, Crimp for 0.100" Center MOLEX Housings
cut	--	--	--	24AWG stranded wire - black
cut	--	--	--	24AWG stranded wire - white
cut	--	--	--	24AWG stranded wire - yellow
cut	--	--	--	24AWG stranded wire - pink

Notes (unless otherwise specified):

---

1. P1 & P2 ship with the KVH compass with 18" of wire

Config	L1	L2	L3	Description
-xxx	x”	x”	x”	--
-001	??	??	??	Controller to compass board MOOS Engr. Dep.

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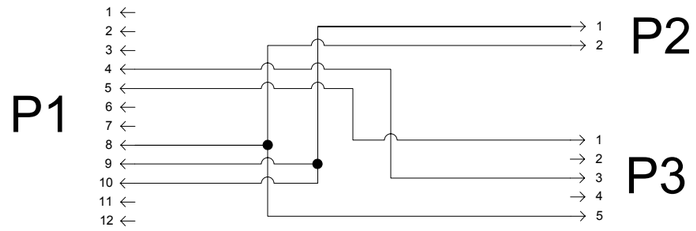
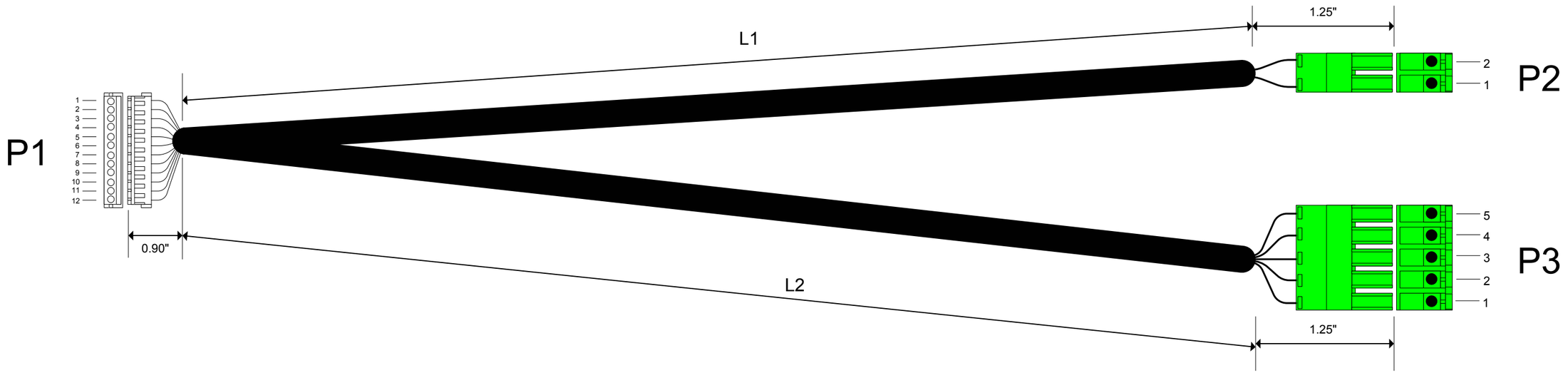
Cable, MOOS Compass to Backplane

Drawn By: Lance McBride | DOC #: 1001552 | REV. A

Date: 07/08/2002 | Sheet: 1 of 1



P1 Pin	P2 Pin	P3 Pin	Size (AWG)	Color	Description
1	--	--	28	Purple	--
2	--	--	28	Green	--
3	--	--	28	Brown	--
4	--	3	28	White	Backplane Rx
5	-	1	28	Blue	Backplane Tx
6	--	--	28	Orange	--
7	--	--	28	Yellow	--
8	2	5	28	Black	Ground
9	1	--	28	White	Power
10	1	--	28	Red	Power
11	--	--	28	Blue	--
12	--	--	28	Grey	--



Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	P1	JST Corp.	ZHR-12	1.5mm Disconnectable Crimp Connector Housing
1	P2	PHOENIX	1836079	5.08mm Connector Terminal Block Plug - 2 pin
1	P3	OST	EDZ1550/5	3.81mm Connector Terminal Block Plug - 5 pin
12	--	JST Corp.	SZH-002T-P0.5	Terminal, Crimp for 1.5mm JST Housing (26-28AWG wire)
cut	--	--	--	28AWG stranded wire - black
cut	--	--	--	28AWG stranded wire - white
cut	--	--	--	28AWG stranded wire - blue
cut	--	--	--	28AWG stranded wire - red

Notes (unless otherwise specified):

---

1. Alternatively, buy Garmin P/N 325-00026-00 and attach the two OST connectors

Config	L1	L2	Description
-xxx	x”	x”	
-001	??	??	Controller to GPS board MOOS Engr. Dep.

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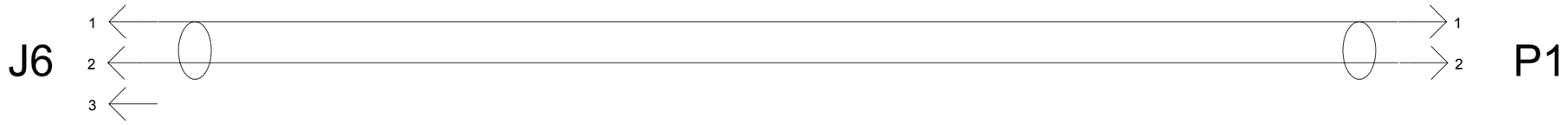
Cable, MOOS GPS to Backplane

Drawn By: Lance McBride | DOC #: 1001553 | REV. A

Date: 07/08/2002 | Sheet: 1 of 1



J6 Pin	P1 Pin	Size (AWG)	Color	Description
1	1	n/a	n/a	Coax shield
2	2	n/a	n/a	Coax center
3	-	n/a	n/a	Coupling

Ref.Des.	Mfgr.	Mfgr P/N	Description
J6	D.G.O'BRIEN	1100001-101	110 Series
P1	PASTERNAC	PE4882	MCX (male)
--	PASTERNAC	RG58C/U	RG-58 COAX (5ft.)

Config	L	Description
-xxx	x"	
-001	??	Controller Lid to GPS Board MOOS Engr. Dep.

Notes (unless otherwise specified):

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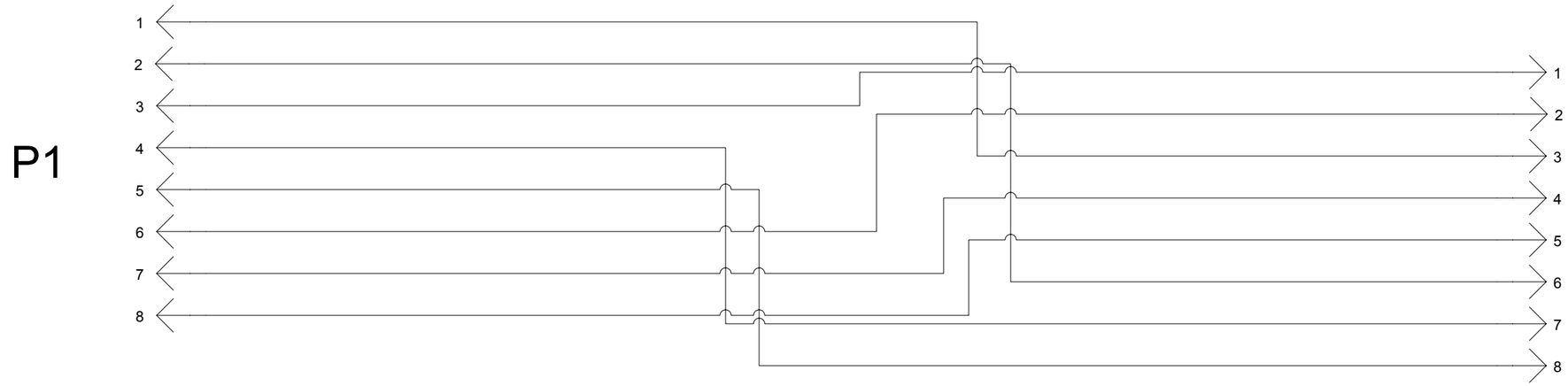
Cable, MOOS Controller Can Lid to GPS Receiver Board

Drawn By: Lance McBride | DOC #: 1001554 | REV. A

Date: 6/20/02 | Sheet: 1 of 1



P1 Pin	P2 Pin	Size (AWG)	Color	Description
1	3	24	white/orange	TX+
2	6	24	orange/white	TX-
3	1	24	white/green	RX+
4	7	24	blue/white	--
5	8	24	white/blue	--
6	2	24	green/white	RX-
7	4	24	white/brown	--
8	5	24	brown/white	--

Ref.Des.	Mfgr.	Mfgr P/N	Description
P1	ASSMAN	AT-AG-8/8	Connector, Modular 8 pin CAT5
P2	ASSMAN	AT-AG-8/8	Connector, Modular 8 pin CAT5
CUT	ALPHA	9504C SL021	CAT5 Ethernet Cable

Config	L	Description
-xxx	x”	
-001	??	SideKICK to SideARM MOOS Engr. Dep.

Notes (unless otherwise specified):

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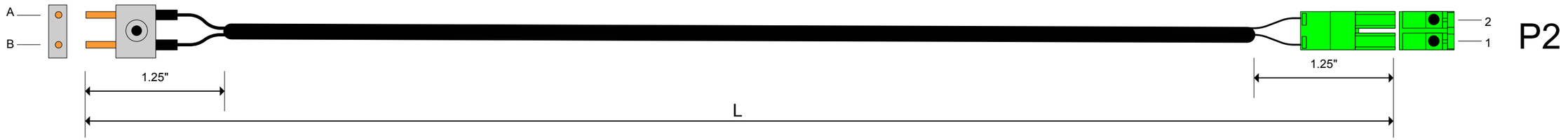
Cable, MOOS Ethernet Crossover SideKICK - SideARM

Drawn By: Lance McBride | DOC #: 1001555 | REV. A

Date: 6/20/02 | Sheet: 1 of 1

P1 Pin	P2 Pin	Size (AWG)	Color	Description
A B	1 2	28 28	black white	



Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1 1 cut cut	P1 P2 -- --	Winchester PHOENIX -- --	JFA2P 1836079 -- --	Gold Plated Plug Connector 5.08mm Connector Terminal Block Plug - 2 pin 28AWG stranded wire - black 28AWG stranded wire - white

Notes (unless otherwise specified):

Config	L	Description
-xxx -001	x” ??	Water Sensor MOOS Engr. Dep.

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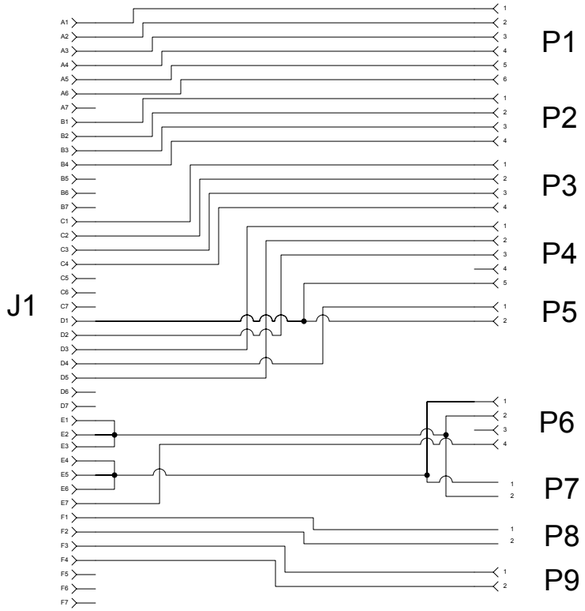
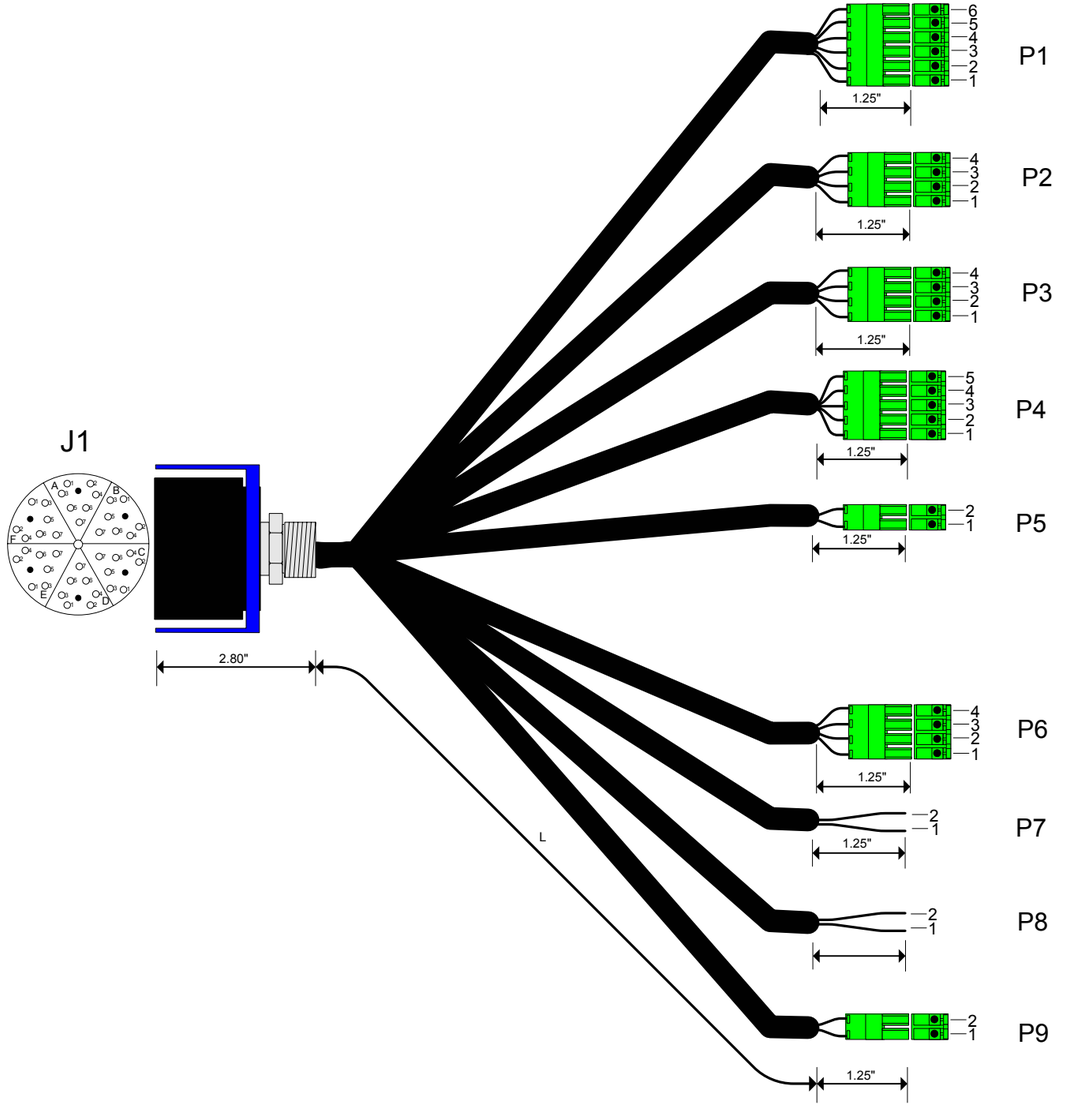
Cable, MOOS Controller Water Sensor

Drawn By: Lance McBride | DOC #: 1001556 | REV. A

Date: 07/08/2002 | Sheet: 1 of 1





J1 Pin	P1 Pin	P2 Pin	P3 Pin	P4 Pin	P5 Pin	P6 Pin	P7 Pin	P8 Pin	P9 Pin	Size (AWG)	Color	Description
A1	1	--	--	--	--	--	--	--	--	20	White	Satcom Isolated Ground
A2	2	--	--	--	--	--	--	--	--	20	White	TX from Satcom Data Port
A3	3	--	--	--	--	--	--	--	--	20	White	RX into Satcom Data Port
A4	4	--	--	--	--	--	--	--	--	20	White	Satcom Isolated +12V
A5	5	--	--	--	--	--	--	--	--	20	White	Satcom DSR Data Port
A6	6	--	--	--	--	--	--	--	--	20	White	Satcom DTR Data Port
A7	--	--	--	--	--	--	--	--	--	20	White	--
B1	--	1	--	--	--	--	--	--	--	20	White	Wireless Console Ground
B2	--	2	--	--	--	--	--	--	--	20	White	TX from controller to wireless console
B3	--	3	--	--	--	--	--	--	--	20	White	RX from wireless console to controller
B4	--	4	--	--	--	--	--	--	--	20	White	Wireless Console Power (+12V)
B5	--	--	--	--	--	--	--	--	--	20	White	--
B6	--	--	--	--	--	--	--	--	--	20	White	--
B7	--	--	--	--	--	--	--	--	--	20	White	--
C1	--	--	1	--	--	--	--	--	--	20	White	Pager Reset Ground
C2	--	--	2	--	--	--	--	--	--	20	White	Pager Relay +
C3	--	--	3	--	--	--	--	--	--	20	White	Pager Relay -
C4	--	--	4	--	--	--	--	--	--	20	White	Pager Reset Power (+12V)
C5	--	--	--	--	--	--	--	--	--	20	White	--
C6	--	--	--	--	--	--	--	--	--	20	White	--
C7	--	--	--	--	--	--	--	--	--	20	White	--
D1	--	--	--	5	2	--	--	--	--	20	White	Heave Sensor Ground
D2	--	--	--	3	--	--	--	--	--	20	White	RX into Heave Sensor
D3	--	--	--	1	--	--	--	--	--	20	White	TX from Heave Sensor
D4	--	--	--	--	1	--	--	--	--	20	White	Heave Sensor Power (+12V)
D5	--	--	--	2	--	--	--	--	--	20	White	Heave Sensor Enable
D6	--	--	--	--	--	--	--	--	--	20	White	--
D7	--	--	--	--	--	--	--	--	--	20	White	--
E1	--	--	--	--	--	2	2	--	--	20	White	Controller Ground from Power Can
E2	--	--	--	--	--	2	2	--	--	20	White	Controller Ground from Power Can
E3	--	--	--	--	--	2	2	--	--	20	White	Controller Ground from Power Can
E4	--	--	--	--	--	1	1	--	--	20	White	Controller Power from Power Can
E5	--	--	--	--	--	1	1	--	--	20	White	Controller Power from Power Can
E6	--	--	--	--	--	1	1	--	--	20	White	Controller Power from Power Can
E7	--	--	--	--	--	4	--	--	--	20	White	Seawater Ground from Power Can
F1	--	--	--	--	--	--	--	1	--	20	White	Surface Strain Gauge Output +
F2	--	--	--	--	--	--	--	2	--	20	White	Surface Strain Gauge Output - (GND)
F3	--	--	--	--	--	--	--	--	1	20	White	Surface Strain Gauge Power + (24V)
F4	--	--	--	--	--	--	--	--	2	20	White	Surface Strain Gauge Power - (GND)
F5	--	--	--	--	--	--	--	--	--	20	White	
F6	--	--	--	--	--	--	---	--	--	20	White	
F7	--	--	--	--	--	--	--	--	--	20	White	

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	J1	SEACON	AWQ-7/42-S-BC	ALL WET Split Series Bulkhead 7/42-pin with 18" 20AWG wire
2	1		SEACON	AWQ-FBLS-D	ALL WET Locking Sleeve for 7/42-pin connector
3	1	P2	OST	EDZ1550/6	3.81mm Connector Terminal Block Plug - 6-PIN
4	3	P3, P4	PHOENIX	1803594	3.81mm Connector Terminal Block Plug 4-pin
5	2	P5	OST	EDZ1550/5	3.81mm Connector Terminal Block Plug - 5 pin
6	2	P6, P9	PHOENIX	1836079	5.08mm Connector Terminal Block Plug - 2 pin

Config	L	Description
-xxx -001	x” CUT	MOOS Controller Internal wiring to Main Connector J1

Notes (unless otherwise specified):

---

1. Cut or extend wires attached to J1 as required
2. Strip and Tin the ends of all specified bare wires for use in screw terminals
3. Terminate the ends of all unused loose wire with heat-shrink tubing to prevent shorts
4. Mark pin #’s on specified bare wires with a label

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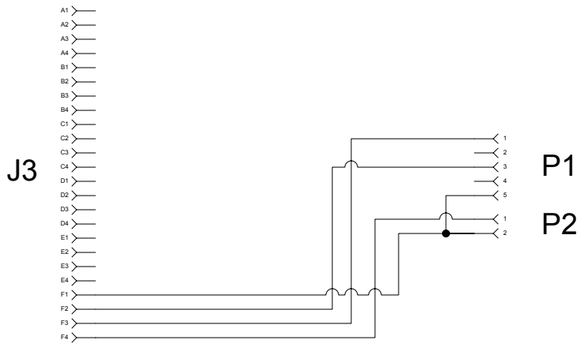
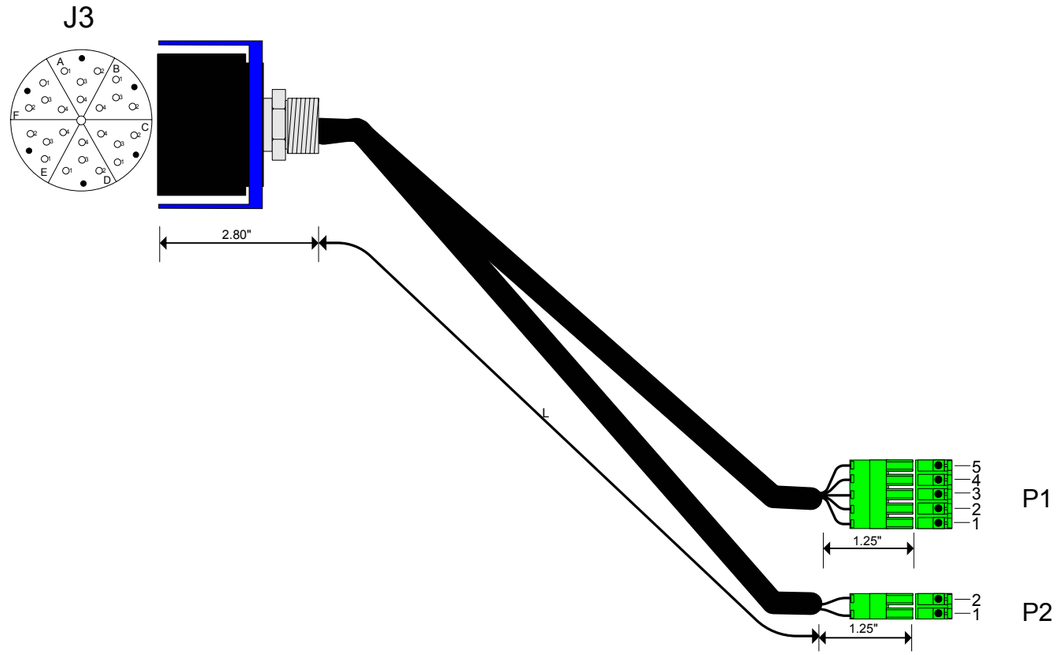
Cable, PIE1 fanout MOOS

Drawn By: Lance McBride | DOC #: 1001557 | REV. A

Date: 07/11/2002 | Sheet: 1 of 1



J3 Pin	P1 Pin	P2 Pin	Size (AWG)	Color	Description
A1	--	--	18	White	--
A2	--	--	18	White	--
A3	--	--	18	White	--
A4	--	--	18	White	--
B1	--	--	18	White	--
B2	--	--	18	White	--
B3	--	--	18	White	--
B4	--	--	18	White	--
C1	--	--	18	White	--
C2	--	--	18	White	--
C3	--	--	18	White	--
C4	--	--	18	White	--
D1	--	--	18	White	--
D2	--	--	18	White	--
D3	--	--	18	White	--
D4	--	--	18	White	--
E1	--	--	18	White	--
E2	--	--	18	White	--
E3	--	--	18	White	--
E4	--	--	18	White	--
F1	5	2	18	White	Ground
F2	3	--	18	White	Receive into backplane
F3	1	--	18	White	Transmit from backplane
F4	--	1	18	White	Power (+12V)



Config	L	Description
-xxx -001	x” CUT	MOOS Controller Internal wiring to Main Connector J1

Notes (unless otherwise specified):

---

1. Cut or extend wires attached to J3 as required
2. Tin the ends of all specified bare wires for use in screw terminals
3. Terminate the ends of all unused loose wire with heat-shrink tubing to prevent shorts
4. Mark pin #’s on specified bare wires with a label

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	J3	SEACON	AWQ-4/24-S-BC	ALL WET Split Series Bulkhead 4/24-pin with 18" 18AWG wire
2	1		SEACON	AWQ-FBLS-D	ALL WET Locking Sleeve for 7/42-pin connector
3	1	P1	OST	EDZ1550/5	3.81mm Connector Terminal Block Plug - 5 pin
4	1	P2	PHOENIX	1836079	5.08mm Connector Terminal Block Plug - 2 pin

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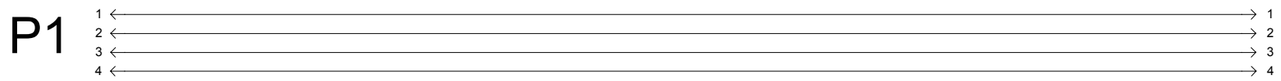
7700 Sandholdt Rd. Moss Landing, CA 95039-9644

Cable, PIE3 fanout MOOS

Drawn By: Lance McBride | DOC #: 1001558 | REV. A

Date: 07/11/2002 | Sheet: 1 of 1



P1 Pin	P2 Pin	Size (AWG)	Color	Description
1	1	20	black	Ground
2	2	20	white	RX into SideARM SP3
3	3	20	yellow	TX from SideARM SP3
4	4	20	orange	RESET_N

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	2	P1, P2	PHOENIX	1803594	3.81mm Connector Terminal Block Plug 4-PIN
2	cut	--	--	--	20AWG stranded wire - black
3	cut	--	--	--	20AWG stranded wire - white
4	cut	--	--	--	20AWG stranded wire - yellow
5	cut	--	--	--	20AWG stranded wire - orange

Notes (unless otherwise specified):

Config	L	Description
-xxx	x”	Console to Interface Board MOOS Engr. Dep.
-001	??	

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Cable, MOOS Controller Console to interface board

Drawn By: Lance McBride | DOC #: 1001559 | REV. A

Date: 07/08/2002 | Sheet: 1 of 1

P1 Pin	P2 Pin	Size (AWG)	Color	Description
1	1	20	blue	TX from SideARM SP1
2	2	20	white	RX into SideARM SP1
3	3	20	yellow	RF CTS
4	4	20	orange	RF RTS
5	5	20	red	RF POWER (+12V)
6	6	20	black	RF GROUND

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	2	P1, P2	OST	EDZ1550/6	3.81mm Connector Terminal Block Plug - 6 pin
2	cut	--	--	--	20AWG stranded wire - black
3	cut	--	--	--	20AWG stranded wire - white
4	cut	--	--	--	20AWG stranded wire - yellow
5	cut	--	--	--	20AWG stranded wire - orange
6	cut	--	--	--	20AWG stranded wire - red
7	cut	--	--	--	20AWG stranded wire - blue

Notes (unless otherwise specified):

Config	L	Description
-xxx -001	x” ??	RF link between Controller & Interface board

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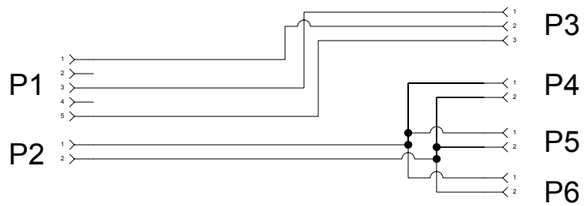
7700 Sandholdt Rd. Moss Landing, CA 95039-9644

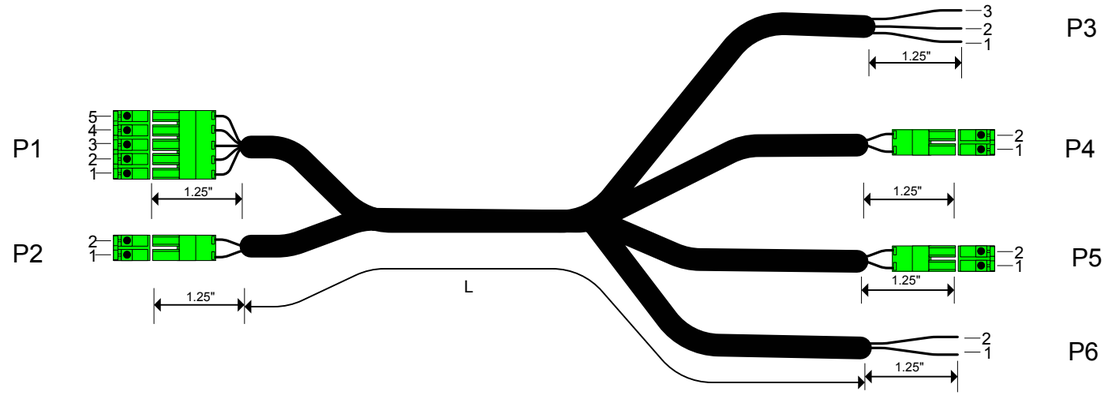
Cable, MOOS Controller RF to Interface Board

Drawn By: Lance McBride | DOC #: 1001560 | REV. A

Date: 07/08/2002 | Sheet: 1 of 1



P1 Pin	P2 Pin	P3 Pin	P4 Pin	P5 Pin	P6 Pin	Size (AWG)	Color	Description
1	--	2	--	--	--	20	Yellow	TX from backplane
2	--	--	--	--	--	--	--	--
3	--	1	--	--	--	20	Blue	RX into backplane
4	--	--	--	--	--	--	--	--
5	--	3	--	--	--	20	Black	Ground
--	1	--	1	1	1	20	Red	+12V
--	2	--	2	2	2	20	Black	Ground



Config	L	Description
-xxx -001	x” CUT	MOOS Controller Internal wiring to Main Connector J1

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	P1	OST	EDZ1550/5	3.81mm Connector Terminal Block Plug - 5 pin
2	3	P2, P4, P5	PHOENIX	1836079	5.08mm Connector Terminal Block Plug - 2 pin
3	CUT	--	--	--	Wire, stranded 20AWG - Yellow
4	CUT	--	--	--	Wire, stranded 20AWG - Blue
5	CUT	--	--	--	Wire, stranded 20AWG - Black
6	CUT	--	--	--	Wire, stranded 20AWG - Red

Notes (unless otherwise specified):

---

1. Cut or extend wires attached to P1 and P2 as required
2. Strip and Tin the ends of all specified bare wires for use in screw terminals
3. Mark pin #'s on specified bare wires with a label
4. Tie wire bundle together when able

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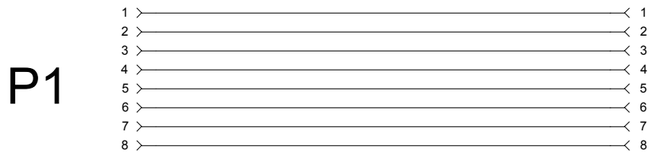
Cable, MOOS Controller to Serial ADC

Drawn By: Lance McBride | DOC #: 1001561 | REV. A

Date: 07/11/2002 | Sheet: 1 of 1



P1 Pin	P2 Pin	Size (AWG)	Color	Description
1	1	20	Pink	Fiber Optic 1 +
2	2	20	White	Fiber Optic 1 -
3	3	20	Green	Fiber Optic 2 +
4	4	20	Black	Fiber Optic 2 -
5	5	20	Brown	Fiber Optic 3 +
6	6	20	Grey	Fiber Optic 3 -
7	7	20	Orange	Fiber Optic 4 +
8	8	20	Yellow	Fiber Optic 4 -

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	P1	OST	EDZ1550/8	3.81mm Connector Terminal Block Plug - 8 pin
2	CUT	--	--	--	Wire, stranded 20AWG - Yellow
3	CUT	--	--	--	Wire, stranded 20AWG - Blue
4	CUT	--	--	--	Wire, stranded 20AWG - Grey
5	CUT	--	--	--	Wire, stranded 20AWG - Pink
6	CUT	--	--	--	Wire, stranded 20AWG - White
7	CUT	--	--	--	Wire, stranded 20AWG - Green
8	CUT	--	--	--	Wire, stranded 20AWG - Brown
9	CUT	--	--	--	Wire, stranded 20AWG - Orange

Notes (unless otherwise specified):

---

1. Cut or extend wires attached to P1 as required
2. Strip and Tin the ends of all specified bare wires for use in screw terminals
3. Mark pin #'s on specified bare wires with a label
4. Tie wire bundle together when able

Config	L1	Description
-xxx	x”	--
-001	??	Fiber Optic sensor to Serial ADC MOOS Engr. Dep.

Monterey Bay Aquarium Research Institute
7700 Sandholdt Rd. Moss Landing, CA 95039-9644

Cable, MOOS Fiber Optic sensor to Serial ADC

Drawn By: Lance McBride | DOC #: 1001562 | REV. A

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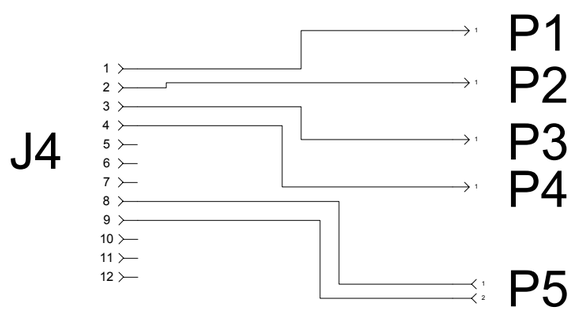
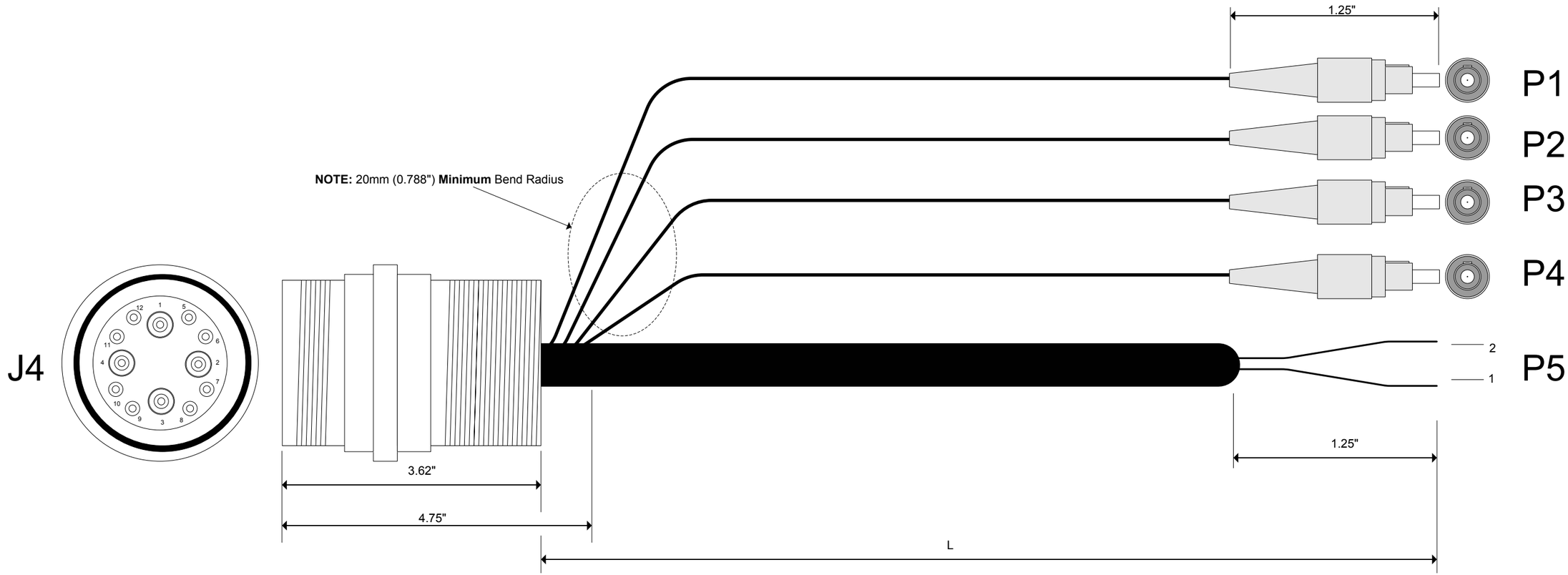


J3 Pin	P1 Pin	P2 Pin	P3 Pin	P4 Pin	P5 Pin	Size (AWG)	Color	Description
1	1	--	--	--	--	SM Fiber	--	Fiber Optic #1
2	--	1	--	--	--	SM Fiber	--	Fiber Optic #2
3	--	--	1	--	--	SM Fiber	--	Fiber Optic #3
4	--	--	--	1	--	SM Fiber	--	Fiber Optic #4
5	--	--	--	--	--	22	Blue	--
6	--	--	--	--	--	22	Orange	--
7	--	--	--	--	--	22	Yellow	--
8	--	--	--	--	1	20	White	Benthic Strain Gauge Output +
9	--	--	--	--	2	20	Green	Benthic Strain Gauge Output -
10	--	--	--	--	--	20	Brown	--
11	--	--	--	--	--	20	Red	--
12	--	--	--	--	--	20	Black	--



Reference MBARI Drawing XXXXXXX when ordering J1 →

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	J1	SEACON	MSSP-4F0/8#16-FBR	Fiber Optic Series Bulkhead Connector

Notes (unless otherwise specified):

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1. Cut or extend copper wires attached to J4 as required
2. Strip and Tin the ends of all specified bare wires for use in screw terminals (P5)
3. Mark pin #'s on specified bare wires with a label
4. Tie wire bundle together when able
5. Ensure all bends in the fiber optic lines exceed the minimum bend radius of 20mm (0.788")

Config	L1	Description
-xxx	x"	--
-001	36"	Benthic Riser Fanout in the Controller Can MOOS Engr. Depl.

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Cable, MOOS Controller Can Riser Fanout

Drawn By: Lance McBride | DOC #: 1001563 | REV. A

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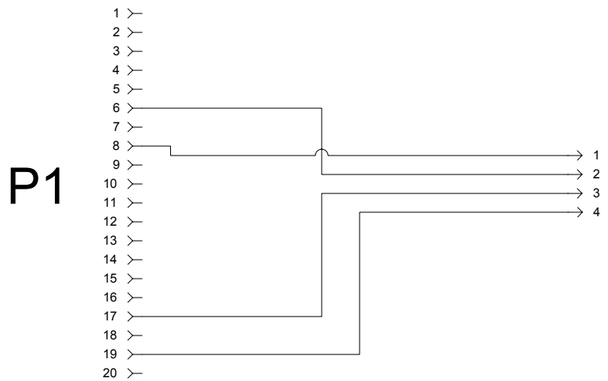

P1 Pin	P2 Pin	Size (AWG)	Color	Description
1	--	24	--	--
2	--	24	--	--
3	--	24	--	--
4	--	24	--	--
5	--	24	--	--
6	2	24	Orange	Ground Fault Error Interupt
7	--	24	--	--
8	1	24	white	Test Ground Fault Circuit
9	--	24	--	--
10	--	24	--	--
11	--	24	--	--
12	--	24	--	--
13	--	24	--	--
14	--	24	--	--
15	--	24	--	--
16	--	24	--	--
17	3	24	Yellow	Ground Fault Warning Interupt
18	--	24	--	--
19	4	24	Black	Ground
20	--	24	--	--

Item	Qty.	Ref.Des.	Mfgr.	Mfgr P/N	Description
1	1	P1	MOLEX	22-55-2201	C-Grid Crimp Connector Housing
2	1	P2	PHOENIX	1803594	3.81mm Connector Terminal Block Plug 4-PIN
3	4	--	MOLEX	16-02-1114	Terminal, C-Grid Crimp Box
4	cut	--	--	--	24AWG stranded wire - black
5	cut	--	--	--	24AWG stranded wire - white
6	cut	--	--	--	24AWG stranded wire - yellow
7	cut	--	--	--	24AWG stranded wire - orange

Config	L	Description
-xxx	x”	Console to Interface Board MOOS Engr. Dep.
-001	??	

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Cable, MOOS GPIO Fanout

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