F6 1.5 A

SR201 ETHERNET
RELAY CONTROLLER

SR201-P1
MODULAR PLUG
RJ45

CH2.NO
CH2.COM
CH2.NC
CH1.NO
CH1.COM
CH1.NC

PWR

RELAY-TB

CT-P17
MODULAR PLUG
Molex
0449150001

CT-P16
1 +VIN (9-36VDC)
2 GND
1843790

CT-P7
MODULAR PLUG
Molex
0449150001

WHT/ORG#24
ORG#24
WHT/GRN#24
GRN#24

CT-P6
MODULAR PLUG
Molex
0449150001

WHT/ORG#24
ORG#24
WHT/GRN#24
GRN#24

1 Red +24 VDC
2 Black VDC Return
7-60 VDC Input

F5 1.5 A

F3 8A +24V (Light 1)

SPLICE WHERE APPROPRIATE

24V Ret/Serial Gnd (Light 1)
->RxD/A+
<-TxD/B-

C5

DVL.TX+	WHT/ORG#24	ORG#20	ETH.TX+
DVL.TX-	ORG#24	BLU#20	ETH.TX-
DVL.RX+	WHT/GRN#24	WHT/BLK#20	ETH.RX+
DVL.RX-	GRN#24	RED/BLK#20	ETH.RX-

VOUT
GND
RS485A
RS485B
MCBH8F

LIGHT 1
or
A125 DVL

F4 8A +24V (Light 2)

24V Ret/Serial Gnd (Light 2)
->RxD/A+
<-TxD/B-
OAK.TX+
OAK.TX-
OAK.RX+
OAK.RX-

C6

VOUT
GND
RS485A
RS485B
ETH.TX+
ETH.TX-
ETH.RX+
ETH.RX-
MCBH8F

LIGHT 2
or
SL Laser
Projector

Frame Gnd (Light 1)
Frame Gnd (Light 2)

LEFT CAMERA

J216
13 SOCKET
Subconn
DBH13FNM

BLK#18	LEFT_GND	
ORG#18	LEFT_GND	
WHT#18	LEFT_RX	
BRN#24	GIGE	
WHT/BRN#24	GIGE	
BLU#24	GIGE	
WHT/BLU#24	GIGE	
ORG#24	GIGE	
WHT/ORG#24	GIGE	
GRN#24	GIGE	
WHT/GRN#24	GIGE	
RED#18	LEFT+12V	
GRN#18	LEFT_TX	

CT-P1
MODULAR PLUG
Molex
0449150001

WHT/ORG#24
ORG#24
WHT/GRN#24
BLU#24
WHT/BLU#24
GRN#24
WHT/BRN#24
BRN#24

RIGHT CAMERA

J215
13 SOCKET
Subconn
DBH13FNM

BLK#18	RIGHT_GND	
ORG#18	RIGHT_GND	
WHT#18	RIGHT_RX	
BRN#24	GIGE	
WHT/BRN#24	GIGE	
BLU#24	GIGE	
WHT/BLU#24	GIGE	
ORG#24	GIGE	
WHT/ORG#24	GIGE	
GRN#24	GIGE	
WHT/GRN#24	GIGE	
RED#18	RIGHT+12V	
GRN#18	RIGHT_TX	

CT-P2
MODULAR PLUG
Molex
0449150001

WHT/ORG#24
ORG#24
WHT/GRN#24
BLU#24
WHT/BLU#24
GRN#24
WHT/BRN#24
BRN#24

Connectech
Xtreme 8 GBE switch

CT-P5
MODULAR PLUG
Molex
0449150001

CT-P3
MODULAR PLUG
0449150001
Molex

CT-P4
MODULAR PLUG
0449150001
Molex

??? 300vdc In,
24vdc, ??watts
out

Black VDC Return

Red +24 VDC

EN
VIN
GND
GND
VOUT

#2858 Pololu 5V, 2.5A D24V22F5
Install R/A CGRID 5-Pin to Board

VDC Return

+375 VDC

Earth

Lancer ST-Dry
500-BST-S1-B02-000

C4

Unused Fiber Port

Black

Red

C3

Seacon MINK 10L BCR

TO ROV

RS-485 Serial 9600 Baud RS-485 Serial 9600 Baud

Moxa 5232I

12-48 VDC
280mA@12vdc

J41
RJ-45 Ethernet

J42
CON3

Org/Wht
Org
Grn/Wht
Grn

+24V (Moxa)
24V Return (Moxa)
Frame Gnd (Moxa)

RASPBERRY PI ZERO W
W/ WAVESHARE ETH & USB HAT

USB PWR

RJ-45 Ethernet

USB HOST

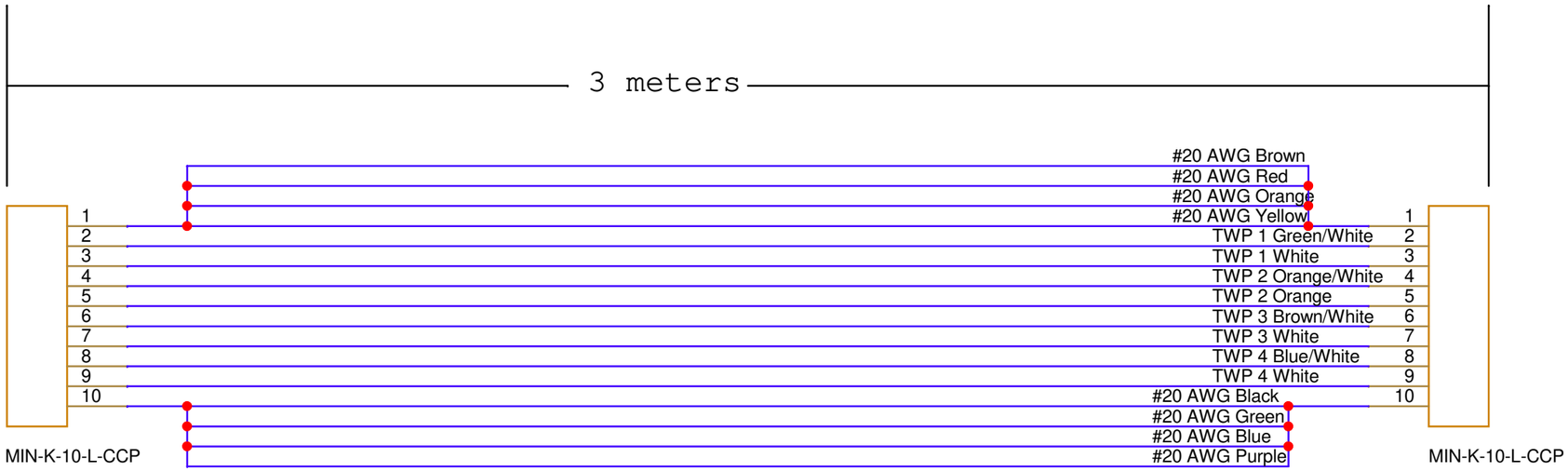
WIRING TBD

J234

VN100
VECTORNAV
AHRS

CON10

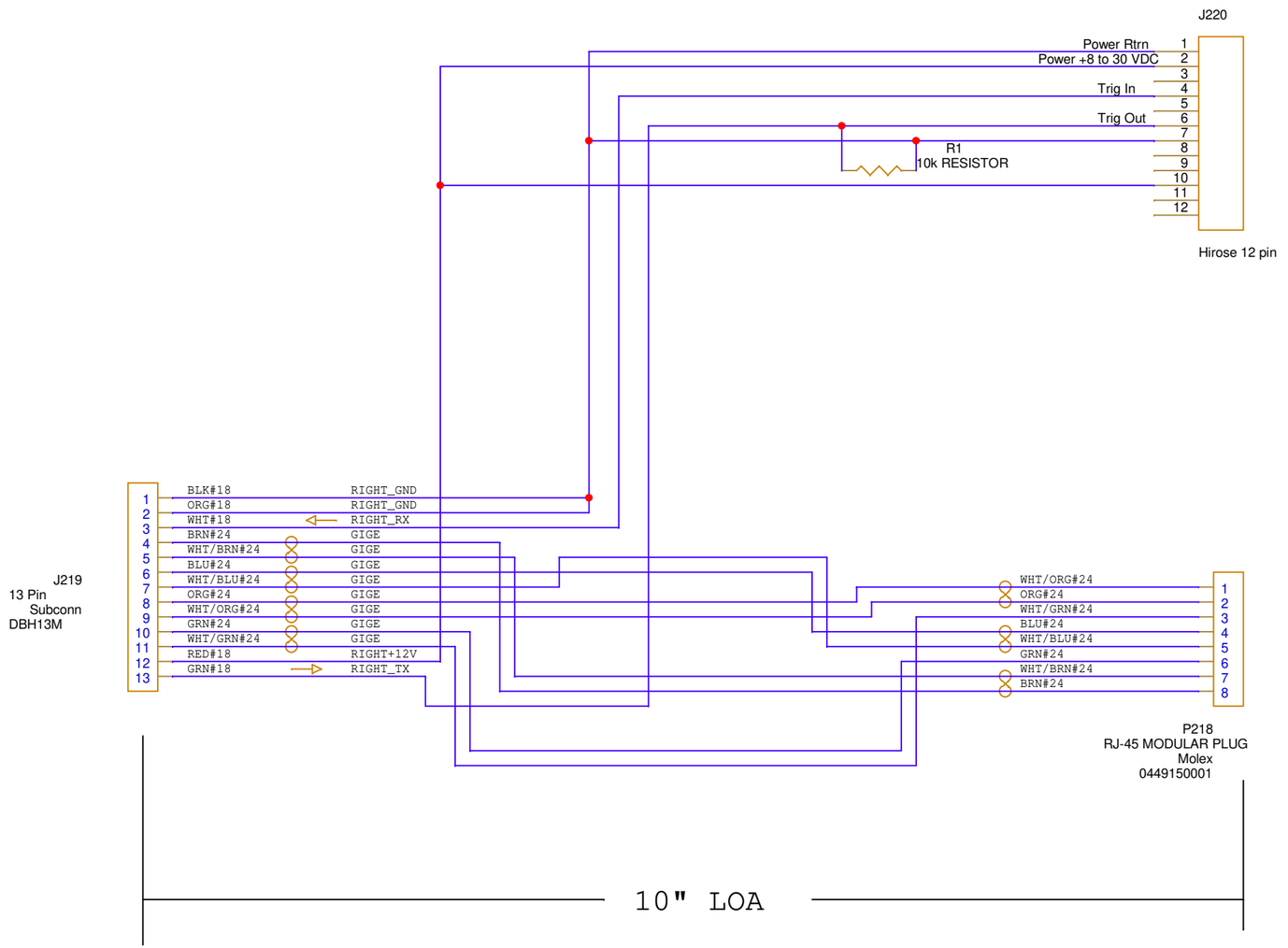
M B A R I	Monterey Bay Aquarium Research Institute 7700 Sandholdt Road, Moss Landing, CA 95039		
	Title: Mesobot Stereo Cam Mux (MODIFIED)		Project: COMPAS/BIL
Engineer: EJM	Size: B	Document Number: 100221828	Part Number: N/A
Designer: EJM	Date: Tuesday, March 21, 2023	Project File: 102284	Rev: B
	Sheet 1 of 8		



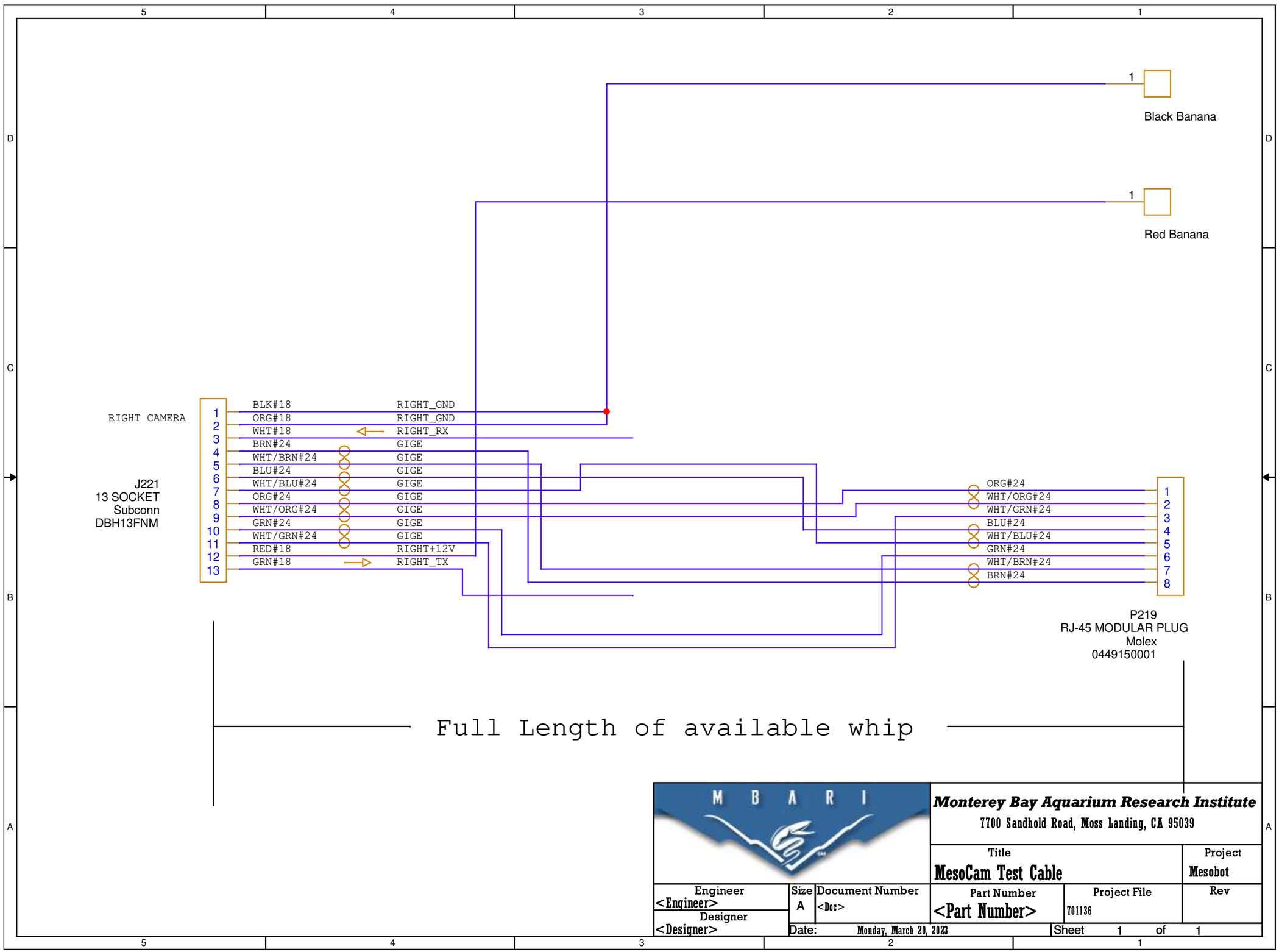
Customer Supplied Cable (CSC) Falmat Extreme-Net FM022208-11

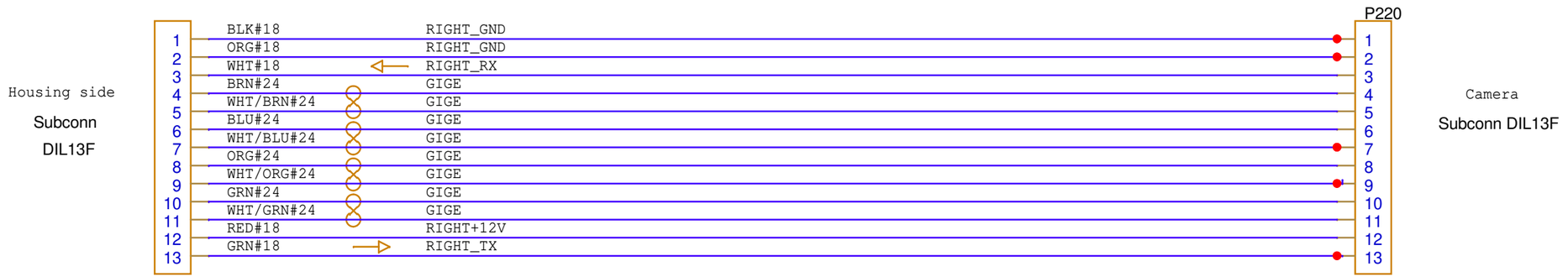
Note: Twists on twisted pairs should be maintained as close to solder cups as possible.
(4) AWG to each of the two 14 guage pins

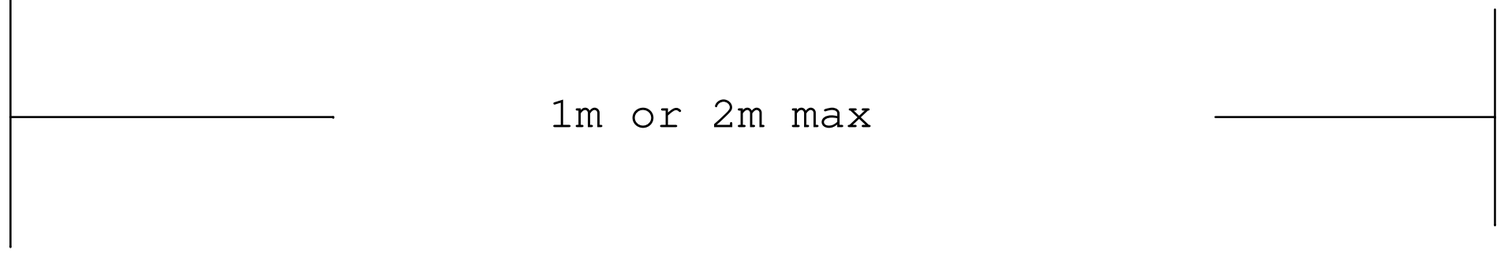
Monterey Bay Aquarium Research Institute 7700 Sandhold Road, Moss Landing, CA 95039				
Engineer: <Engineer> Designer: <Designer>	Size: A	Document Number: <Doc>	Title: Seacon MINK10L GigE Wet Cable Part Number: <Part Number>	Project: Mesobot Project File: 701136 Rev:
	Date: Monday, March 20, 2023		Sheet 1 of 1	



Monterey Bay Aquarium Research Institute, 7700 Sandhold Road, Moss Landing, CA 95039			
Title: MesoCam Internal Wiring			Project: Mesobot
Engineer	Size: B	Document Number	Part Number / Project File: 701136 / Rev
Designer	Date: Monday, March 20, 2023		Sheet 1 of 1


5
4
3
2
1
D
C
B
A
1
Black Banana
1
Red Banana
RIGHT CAMERA
1 BLK#18 RIGHT_GND
2 ORG#18 RIGHT_GND
3 WHT#18 RIGHT_RX
4 BRN#24 GIGE
5 WHT/BRN#24 GIGE
6 BLU#24 GIGE
7 WHT/BLU#24 GIGE
8 ORG#24 GIGE
9 WHT/ORG#24 GIGE
10 GRN#24 GIGE
11 WHT/GRN#24 GIGE
12 RED#18 RIGHT+12V
13 GRN#18 RIGHT_TX
J221
13 SOCKET
Subconn
DBH13FNM
ORG#24 1
WHT/ORG#24 2
WHT/GRN#24 3
BLU#24 4
WHT/BLU#24 5
GRN#24 6
WHT/BRN#24 7
BRN#24 8
P219
RJ-45 MODULAR PLUG
Molex
0449150001
Full Length of available whip
M B A R I
Monterey Bay Aquarium Research Institute
7700 Sandhold Road, Moss Landing, CA 95039
Title
MesoCam Test Cable
Project
Mesobot
Engineer
<Engineer>
Designer
<Designer>
Size
A
Document Number
<Doc>
Part Number
<Part Number>
Project File
701136
Rev
Date: Monday, March 20, 2023
Sheet 1 of 1





Monterey Bay Aquarium Research Institute 7700 Sandhold Road, Moss Landing, CA 95039				
Title: MesoCam Camera Cable				Project: Mesobot
Engineer	Size: A	Document Number	Part Number	Project File: 701136 / Rev
Designer	Date: Monday, March 20, 2023			Sheet 1 of 1

MCIL8M on
SOOW #20/8C

DVL A125
Waterlinked DVL
W/ STOCK PU CABLE

DVL A125

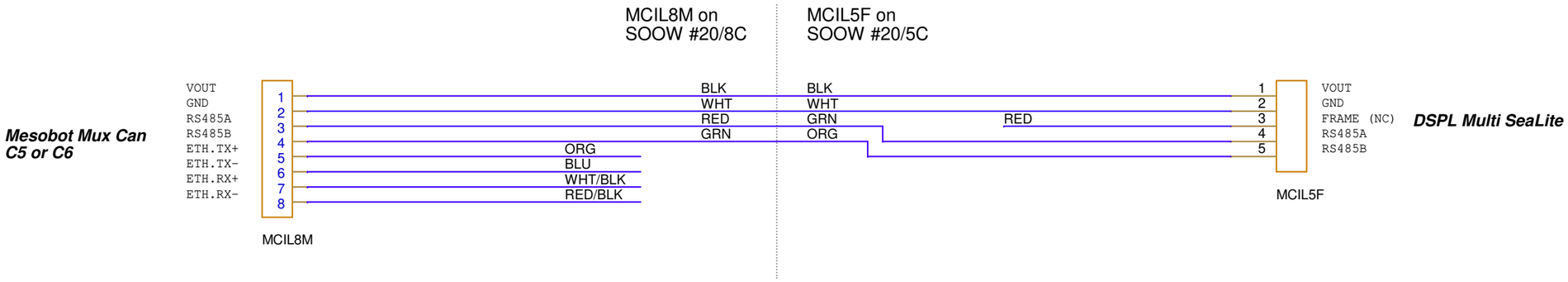
MCIL8M			DVL A125	
VOUT	1	BLK	RED	POSITIVE (10-30V)
GND	2	WHT	BLK	NEGATIVE/GROUND
RS485A	3	RED		
RS485B	4	GRN		
ETH.TX+	5	ORG	ORG/WHT	ETH TX+
ETH.TX-	6	BLU	ORG	ETH TX-
ETH.RX+	7	WHT/BLK	GRN/WHT	ETH RX+
ETH.RX-	8	RED/BLK	GRN	ETH RX-
			BRN/WHT	UART TX
			BRN	UART RX

SPLICE

M B A R I

Monterey Bay Aquarium Research Institute
7700 Sandholdt Road, Moss Landing, CA 95039

Engineer	Size	Document Number	Title	Project
E|M	A	100221828	MiniROV DVL A125 Wiring	902204
Designer			**Part Number**	**Project File**	**Rev**
E|M			002	X:\902204..\MiniCompasBilSled	A
			Date: Monday, March 20, 2023	Sheet 2 of 8	



NOTES

1. Overall Length 3 FT

MBARI	*Monterey Bay Aquarium Research Institute* 7700 Sandholdt Road, Moss Landing, CA 95039			
	Title: MiniROV MLCAN Lamp Adaptor Cable			Project: 902204
Engineer: E|M	Size: A	Document Number: 100221828	Part Number: 100221828-004	Project File: X:\902204..\MiniCompasBitSled	Rev: A
Designer: E|M	Date: Monday, March 20, 2023		Sheet 3 of 8	