

Board 1

From Binary Output Module

+5V  
-5V

Board 2 (50)

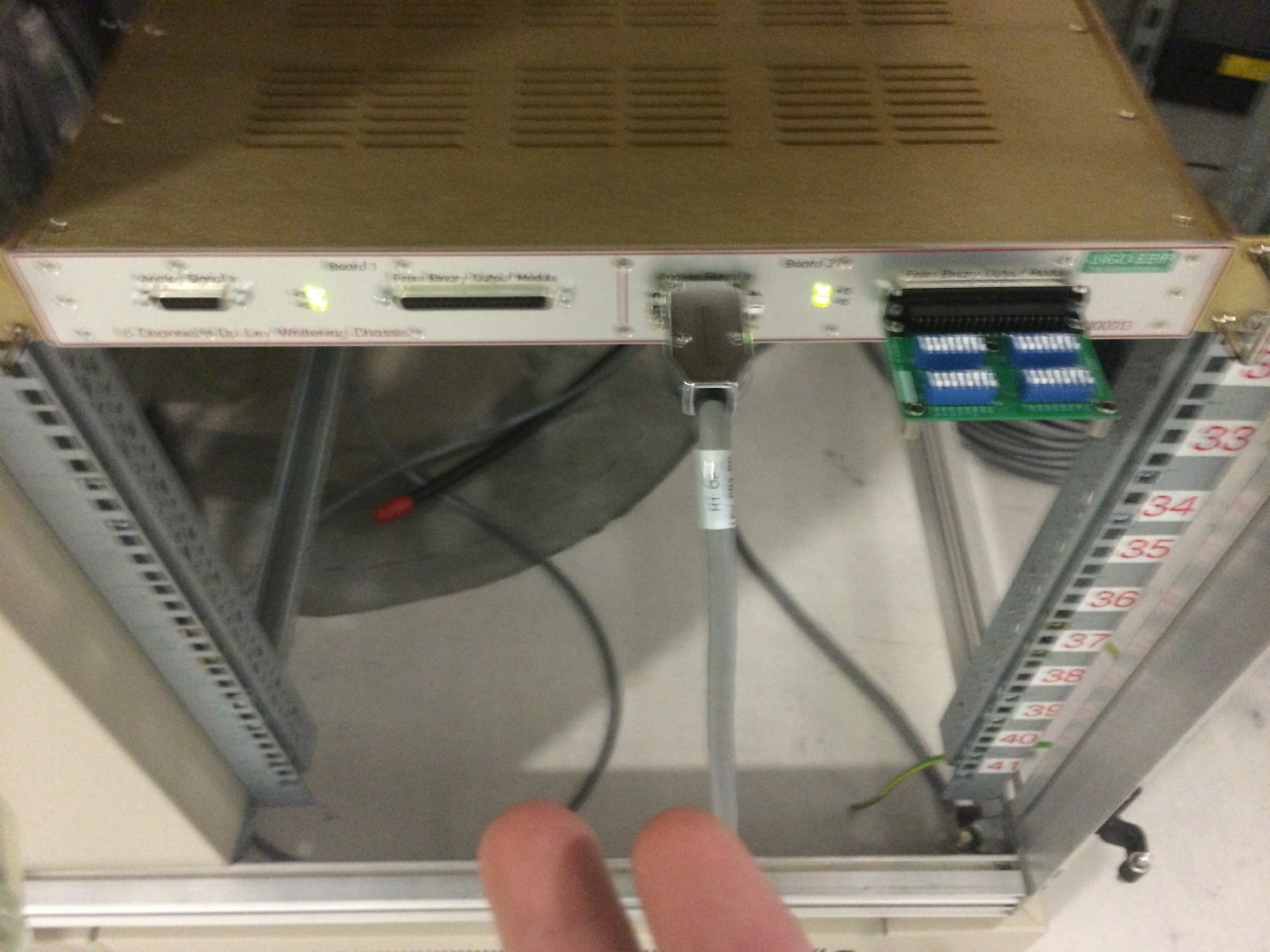
From Binary Output Module

+5V  
-5V

Low-Whitering Chassis

L150 EEIII

01962713



Transfer Serial In  
Board 1  
Fast Binary Output Module  
16 Channel 40 Gb Lev Whitening Channel

Analogue Serial  
Board 2  
Fast Binary Output Module  
LIGO EPIC



- 33
- 34
- 35
- 36
- 37
- 38
- 39
- 40
- 41



ard 2

+15  
-15

From Binary Output Module

LIGO EE  
No Electrical Hazard

1100013

Binary Output Configuration Board

Binary Output Configuration Board

SW1 SW2 SW3

B0 B1 B2 B3 B4 B5 B6 B7  
B8 B9 B10 B11 B12 B13 B14 B15  
B16 B17 B18 B19 B20 B21 B22 B23  
B24 B25 B26 B27 B28 B29 B30 B31

SW1 SW2 SW3

B0 B1 B2 B3 B4 B5 B6 B7  
B8 B9 B10 B11 B12 B13 B14 B15  
B16 B17 B18 B19 B20 B21 B22 B23  
B24 B25 B26 B27 B28 B29 B30 B31

D1001631 V2 SN

LIGO EEIP  
No Electrical Hazard

1100013

From Binary Output Module

AKP0823 D  
5747843-4

P1  
BINARY OUTPUT  
CONFIGURATION BOARD

ROCKER DOWN  
1 0  
B16 B17 B18 B19 B20 B21 B22 B23

ROCKER DOWN  
1 0  
B24 B25 B26 B27 B28 B29 B30 B31

ROCKER DOWN  
1 0  
B0 B1 B2 B3 B4 B5 B6 B7

ROCKER DOWN  
1 0  
B8 B9 B10 B11 B12 B13 B14 B15

D1001631 v2 SN

Board 2

Board 2

+15  
-15

**LIGO EEIP**  
No Electrical Hazard

From Binary Output Module

1100013

AMP0825

ROCKER DOWN

ROCKER DOWN

ROCKER DOWN

ROCKER DOWN

BINARY OUTPUT BOARD

CONFIGURATION BOARD

P1

S3

S1

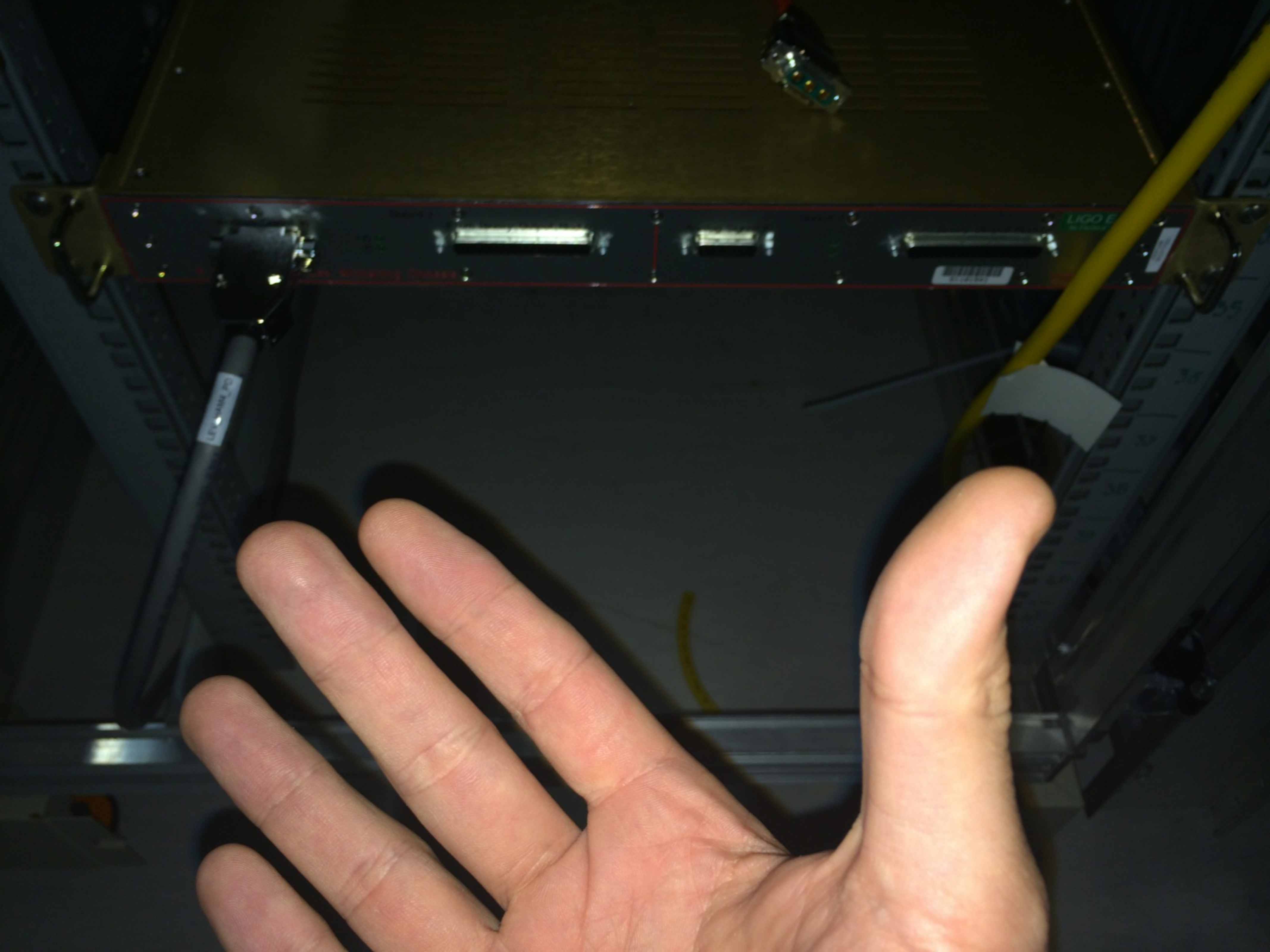
B0 B1 B2 B3 B4 B5 B6 B7

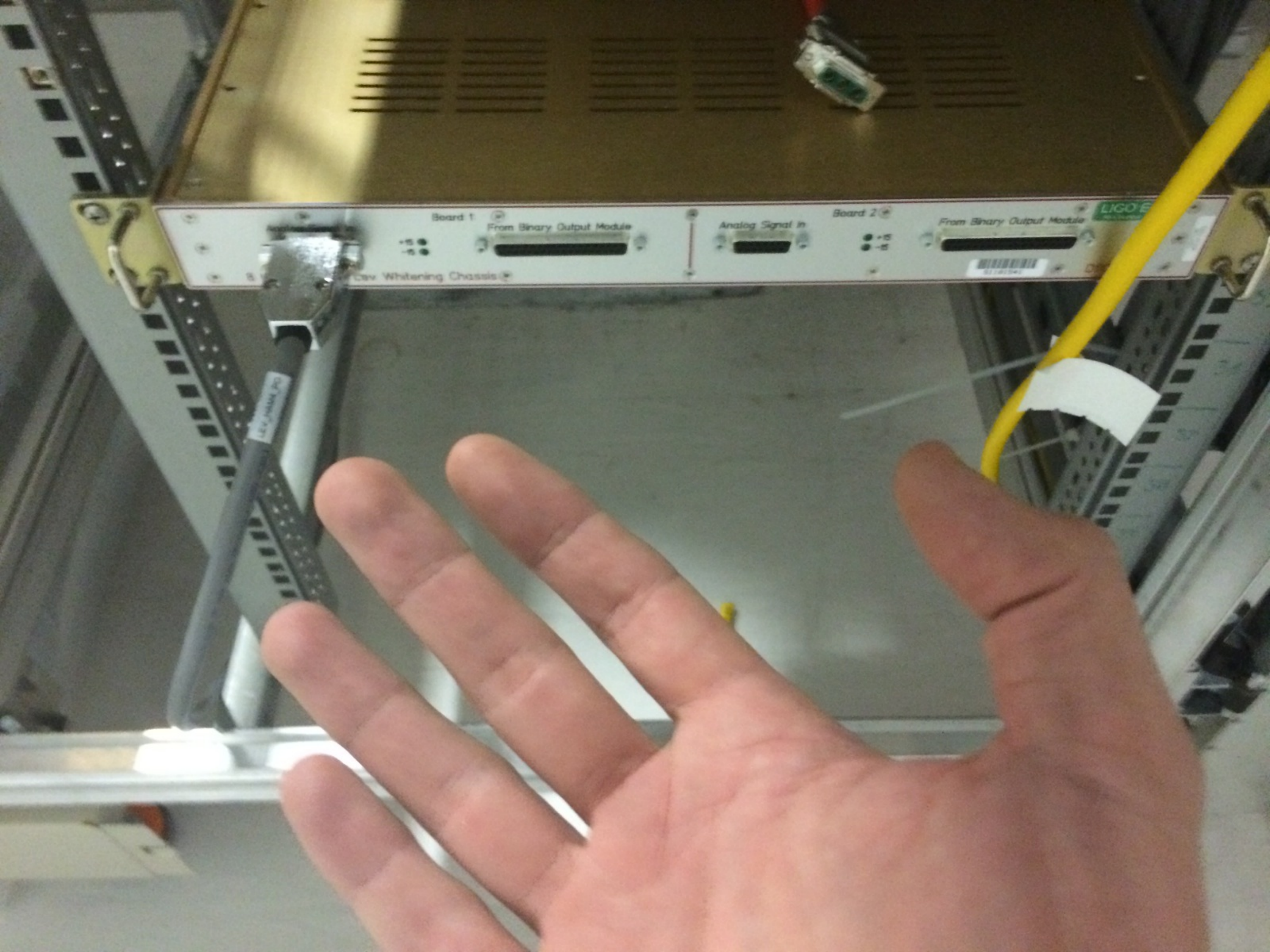
B8 B9 B10 B11 B12 B13 B14 B15

D1001631 v2 SN

0 1 0 0

34  
35





Board 1

From Binary Output Module

+5  
-5

Analog Signal In

Board 2

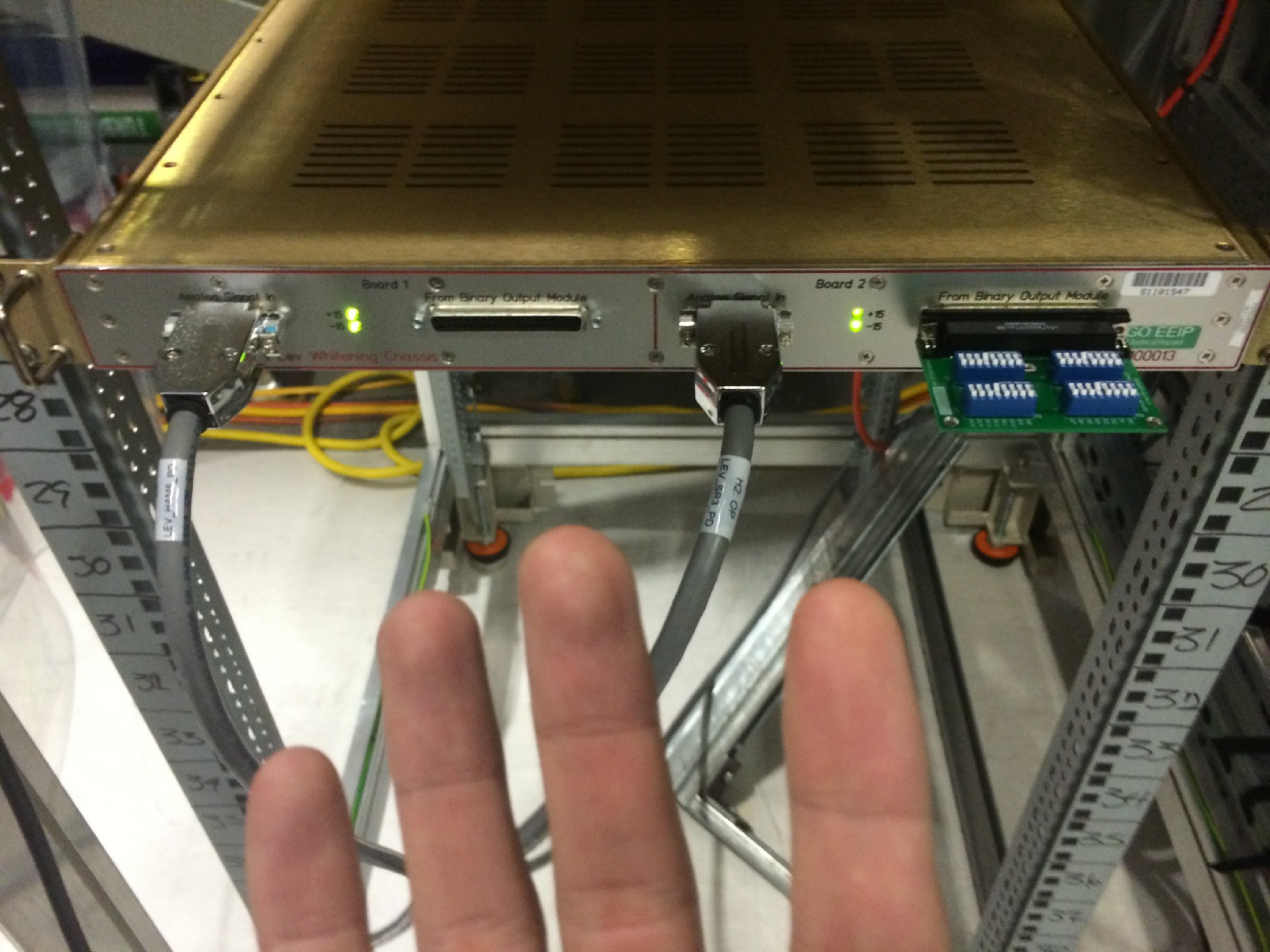
From Binary Output Module

+5  
-5

LIGO E11

Whitering Chassis

L11-11111-1111



Analog Signal In

Board 1

From Binary Output Module

Analog Signal In

Board 2

From Binary Output Module

+5  
-5

+5  
-5

Lev Whitering Chassis

51191547

GO EEIP

100013

LEV\_HAISE\_PD

H2\_OP  
LEV\_SR3\_PD

28

29

30

31

32

33

34

30

31

32

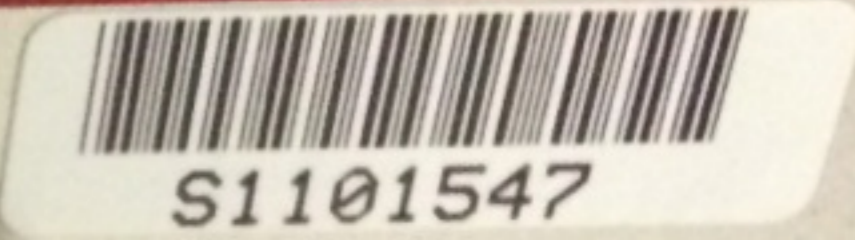
33

34



Board 2

From Binary Output Module



S1101547

+15  
-15

GO EEIP  
Electrical Hazard  
1100013

AMPHENOL  
6E17C037PAJ121

Binary Output Configuration Board

80 81 82 83 84 85 86 87

88 89 90 91 92 93 94 95

96 97 98 99 100 101 102 103

104 105 106 107 108 109 110 111

112 113 114 115

0 1 0 1 0

ROCKER DOWN

CONFIGURATION BOARD

0 1 0 1 0

REPLACEMENT



S1101547

Board 2

From Binary Output Module

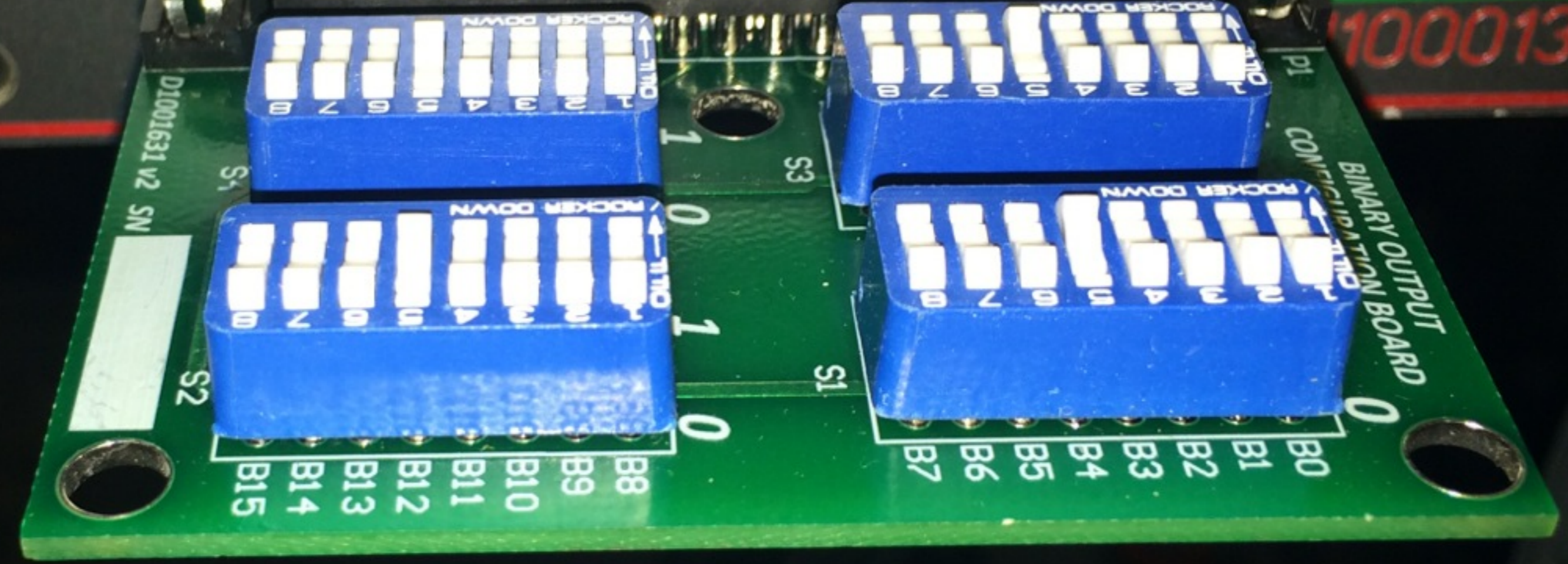
In

+15  
-15



GO EEIP  
Electrical Hazard

100013



D1001631 v2 SN

S2

B8  
B9  
B10  
B11  
B12  
B13  
B14  
B15

1

S3

1

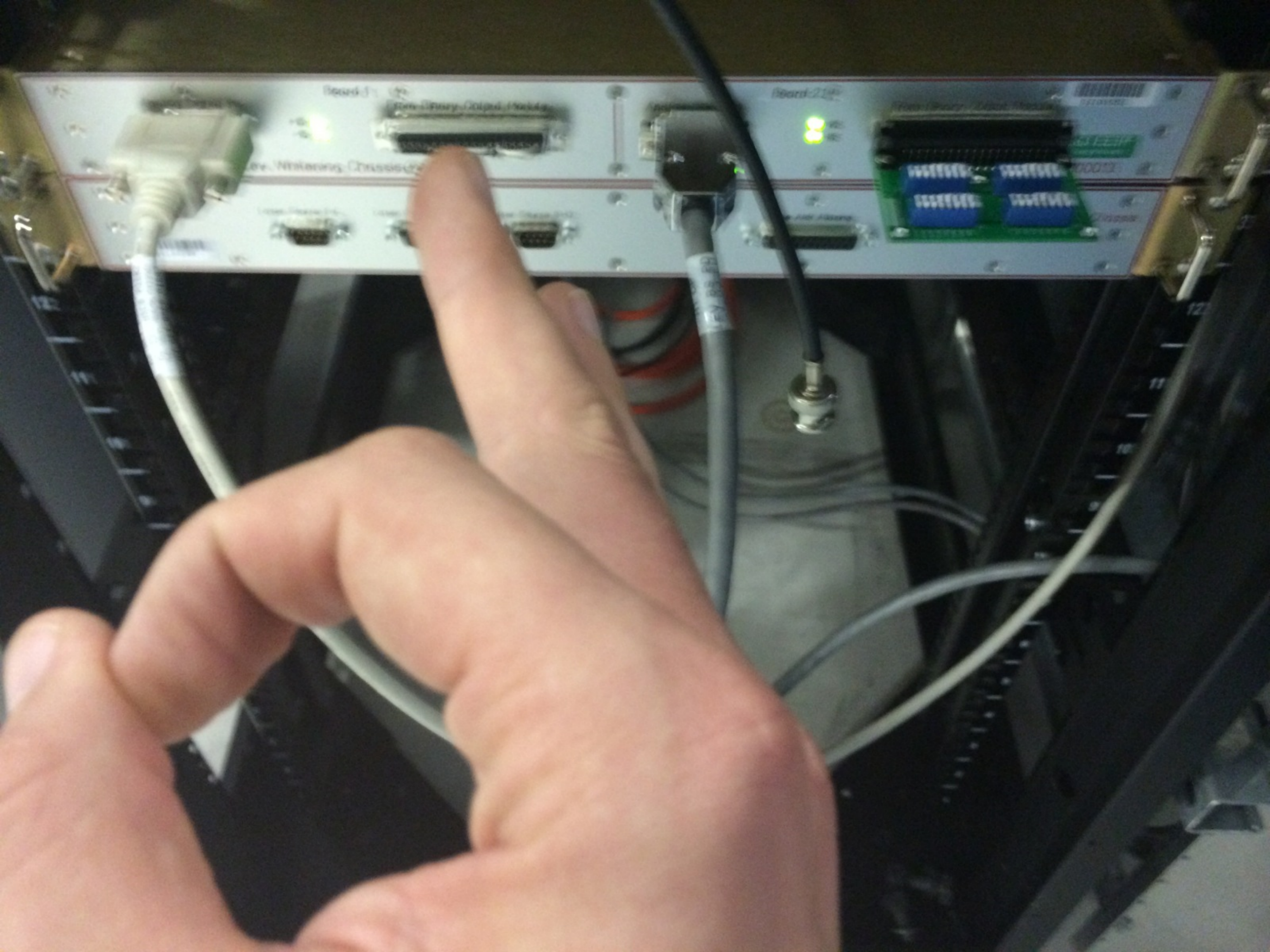
0

S1

B7  
B6  
B5  
B4  
B3  
B2  
B1  
B0

BINARY OUTPUT BOARD  
CONFIGURATION

0



Board 2

S1101551

From Binary Output Module

+15  
-15

GO EEIP  
Electrical Hazard  
1100013

AMPO704 A

BINARY OUTPUT CONFIGURATION BOARD

S4 S3 S2 S1

B8 B7 B6 B5 B4 B3 B2 B1 B0  
B15 B14 B13 B12 B11 B10 B9

D1001631 v2 SN

ROCKER DOWN

0 1 0 1 0 0

Chassis

EE LAB

Board 1

From Binary Output Module

Analog Signal In

Board 2

From Binary Output Module

S1101550

LIGO EEIP  
No Electrical Hazard

D1100013

+15  
-15

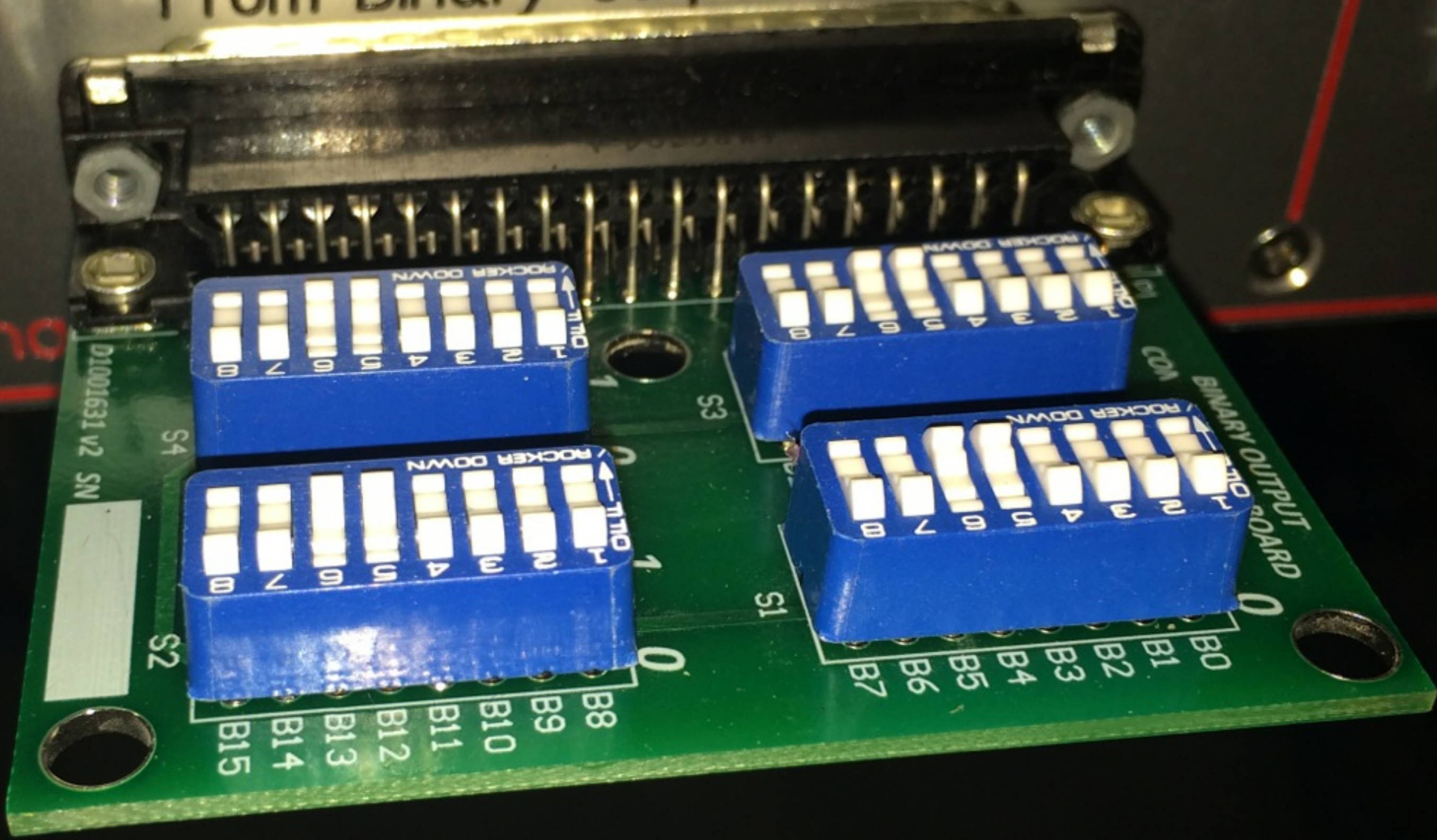


Board 1

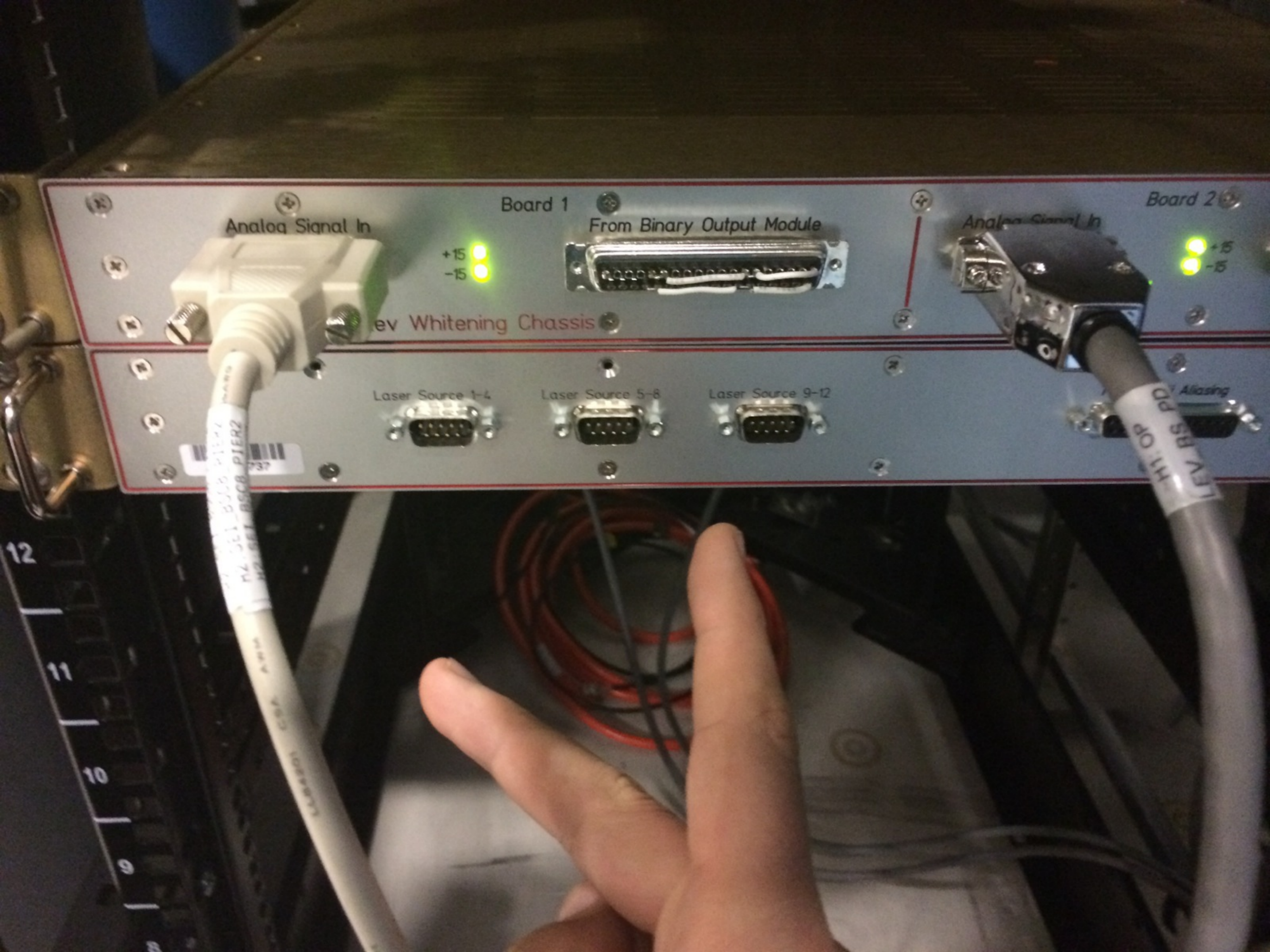
From Binary Output Module

+15  
-15

Whitening Cho



Analog



Analog Signal In

Board 1

From Binary Output Module

Board 2

Analog Signal In

+15  
-15

+5  
-5

ev Whitening Chassis

Laser Source 1-4

Laser Source 5-8

Laser Source 9-12

Aliasing

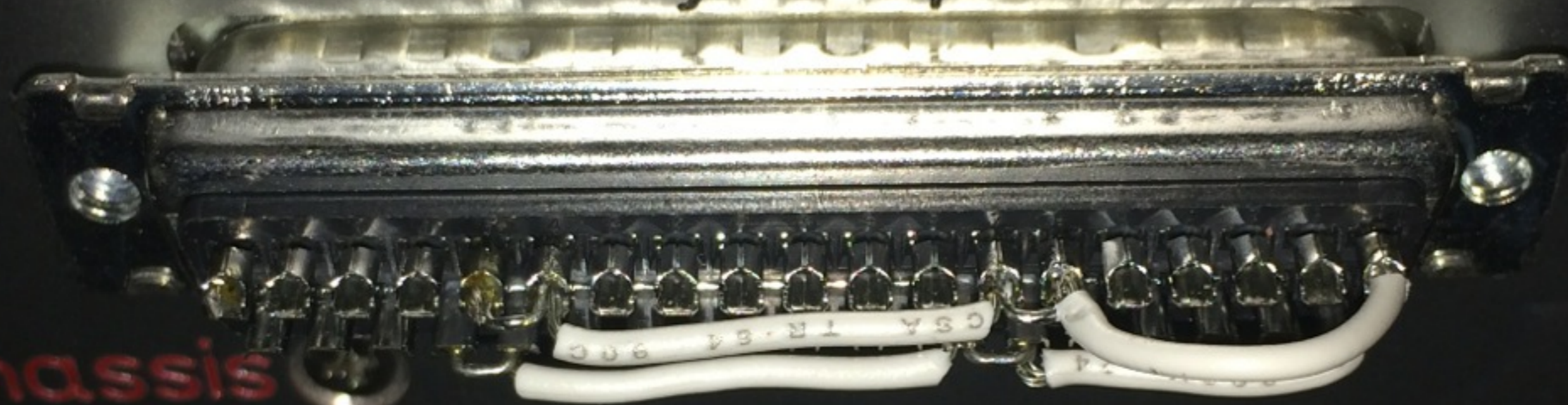
M4 JLI BSC8 PIER2

HI OP 80 '14' LEV BSC8 PIER2

12  
11  
10  
9

Board 1

From Binary Output Module



15  
-15

Whitening Chassis





Board 1

From Binary Output Module

15  
-15



Whitening Chassis

Source 1-4



Laser Source 5-8



Laser Source 9-12



Board 1

From Binary Output Module



g Chassis

Source 5-8

Laser Source 9-12

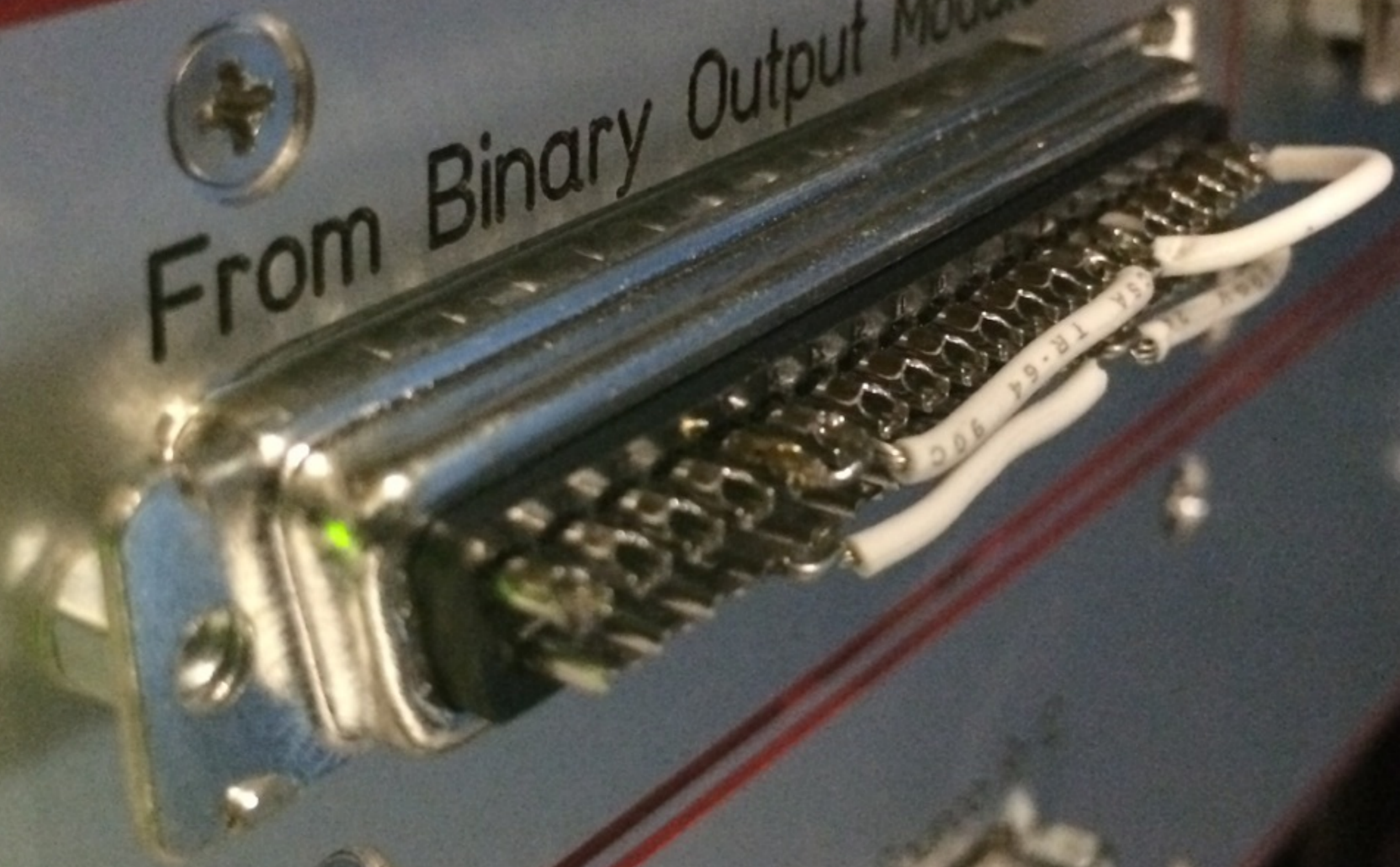
Board 1

From Binary Output Module

chassis

5-8

Loss of Signal



BOARD 1

 From Binary Output Module

