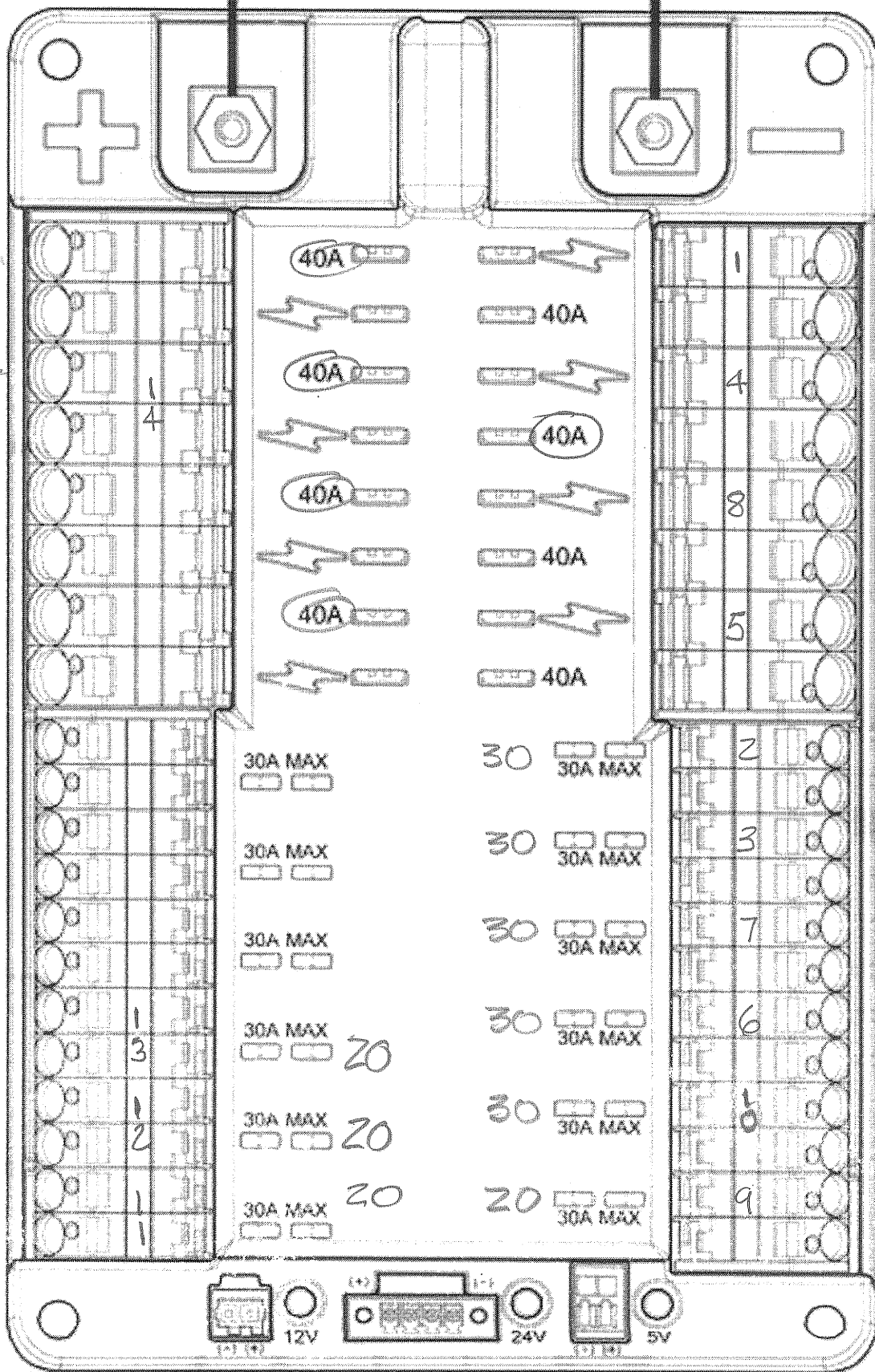


Breaker

# Distribution Board



Udders

Processor

Roller

Solenoid Driver

Analogue Breakout

Analogue Breakout

legs

Left Rear Drive

Left Front Drive

Right Front Drive

Right Rear Drive

Left Rear Steering

Left Front Steering

Right Front Steering

Right Rear Steering

Compressor Spike

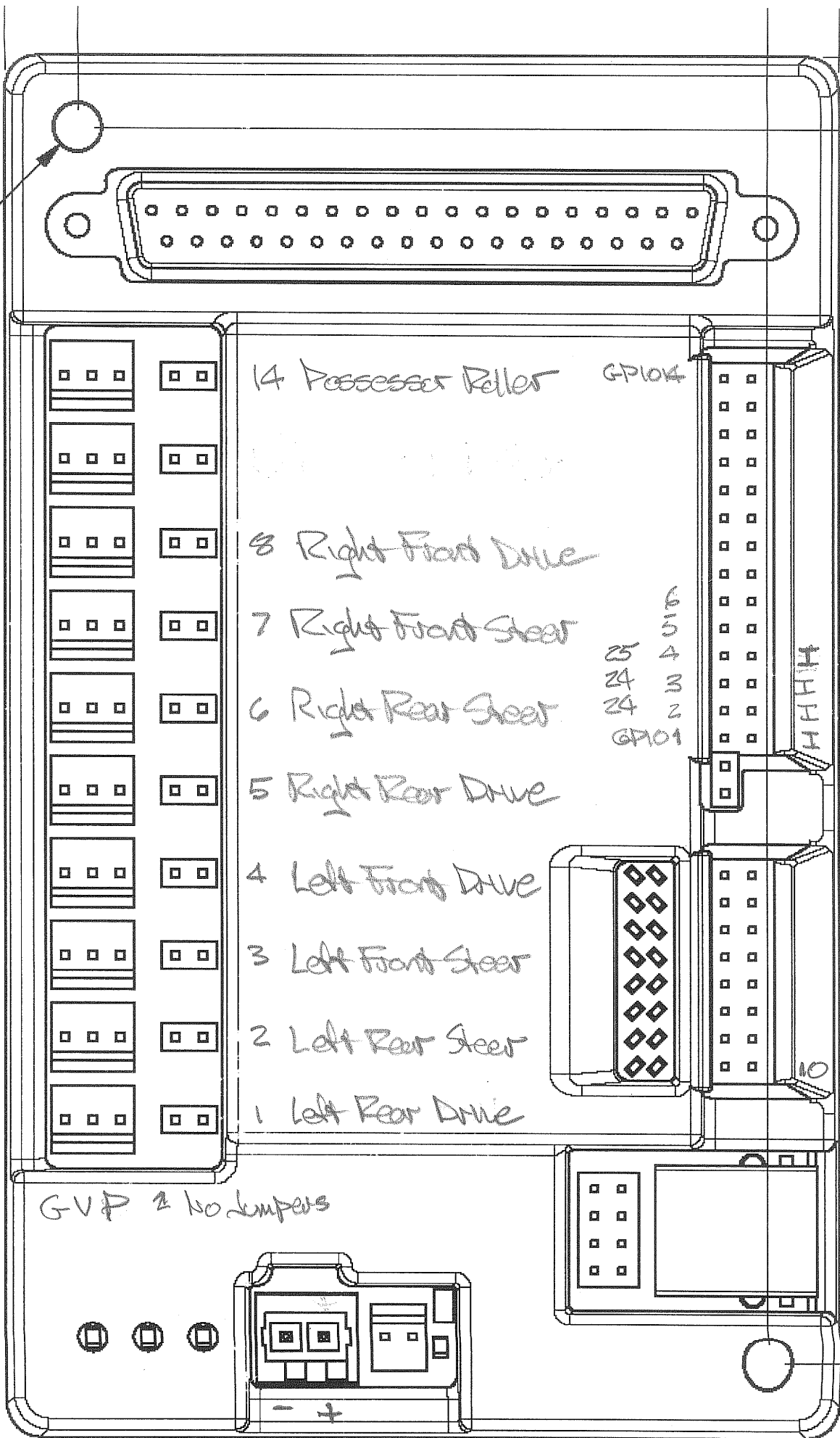
Digital Subgear

Access Point

GPIO 19

Camera 20

2X Ø.173 [4.38] THRU

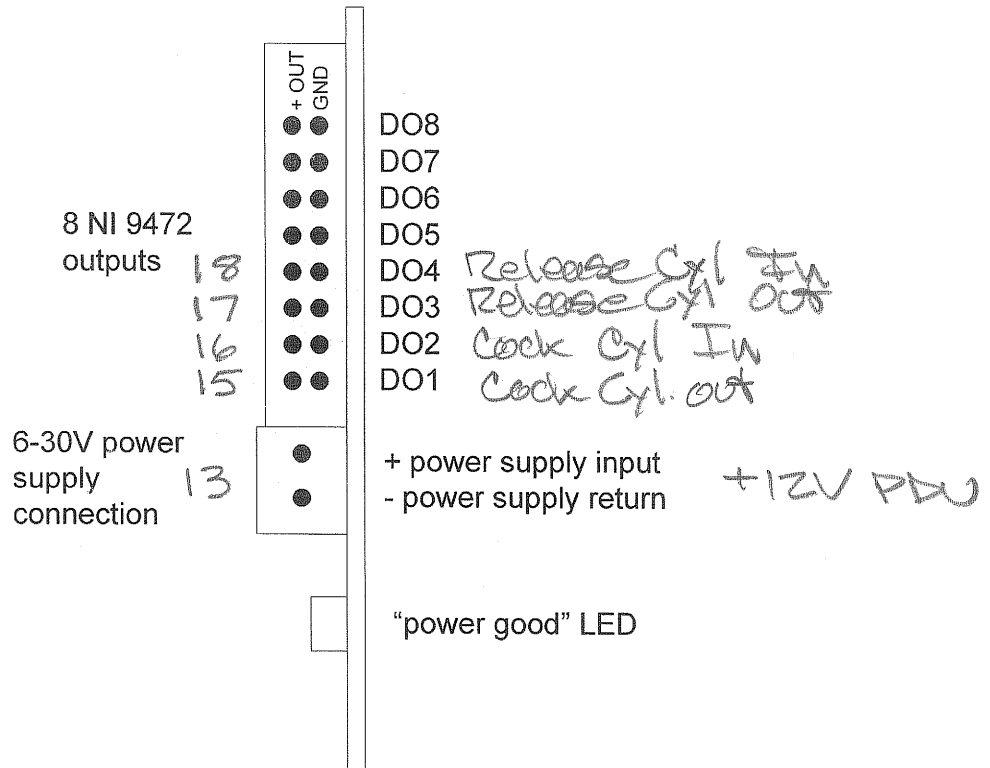


GVP 2 No Lumps

9 ADV FOR Signal Light

### 3.6.1.2 Pinout

#### Solenoid Breakout – side view of connectors



PCB Reference Designator	Name	Description
J1	DB25	Mates to NI9472 (with optional cable)
J2	Digital Outputs	Mates to 2 conductor cables
J3	Power In	734-162 mates with 734-102
D1	Power LED	Lights when power is properly applied

### 3.6.2 Typical Application

\*\* Always refer to FIRST rules for using this module in competition robots. The following sequence describes an example application that may not fully comply with FIRST rules.

# 2nd Channel Analog

## Analog Breakout – side view of connectors

1st channel

Place jumper on the top 2 pins for connecting battery voltage to A18 or jumper on the bottom 2 pins for connecting A18 from the 3x8 connector

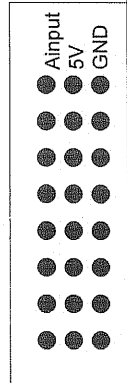


Battery voltage via resistor divider  
A18 input to the NI 9201  
A18 from the 3x8 connector

27 Line Opto 2  
26 Line Opto 1  
23 Right IR  
22 Left IR  
21 Gyro

8 analog inputs

4  
3  
2  
1



A18 Right Front  
A17 Left Front  
A16 Left Rear  
A15 Right Rear  
A14 Right Front  
A13 Left Front  
A12 Left Rear  
A11 Right Rear

Steering calibration Pops

Steering Encoders

6-20V power supply connection

12



+ power supply input  
- power supply return

+12V PDU

"power good" LED

PCB Reference Designator	Name	Description
J1	DB25	Mates to NI 9201 (with optional cable)
J2	Analog Input	Mates to 8 3-conductor cables
J3	Power Input	734-162 mates to 734-102 Supplies power to the module
J4	A18 Select	Accepts 2 conductor Shunt Selects what A18 is connected to.
D2	Power LED	Lit when power is applied