

12V TO 40V  
POWER SUPPLY

RS485 A  
RS485 B  
GROUND  
+12V to +40V

GROUND  
+12V to +40V

RS485 CONVERTER

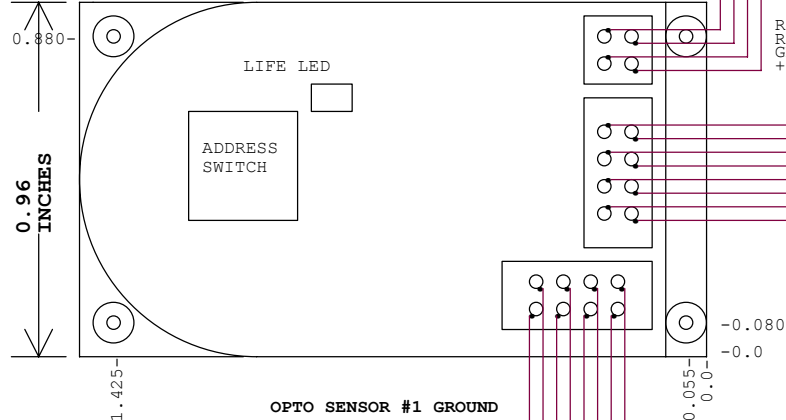
DB9 TO COM  
PORT ON PC

TO PC COM PORT  
  
USE 9600 BAUD  
8BIT, NO PARITY,  
1 STOP, NO FLOW  
CTRL.

TO OTHER EZ SERVOS  
OR EZ STEPPERS

**DO NOT UNPLUG LOADS WHILE POWER IS ON**

1.5 INCHES  
  
1.4 INCHES  
SMALLER VERSION HAS NO MOUNTING HOLES



RS485 A  
RS485 B  
GROUND  
+12V to +40V

+5V  
CHAN A  
INDEX  
CHAN B  
GROUND  
GROUND

MOTOR+  
MOTOR-

ENCODER

DC  
BRUSH  
MOTOR

MOTOR POWER

- USE 0-80 OR M1.6 MOUNTING SCREWS.
- OPTO SENSOR #1 GROUND
- OPTO SENSOR #1 PHOTO TRANSISTOR
- OPTO SENSOR #1 LED
- OPTO SENSOR #2 GROUND
- OPTO SENSOR #2 PHOTO TRANSISTOR
- OPTO SENSOR #2 LED / OPTIONAL TTL OUTPUT
- SWITCH #1 CLOSURE TO GROUND INPUT
- SWITCH #2 CLOSURE TO GROUND INPUT

NOTE: ENCODER AND I/O WIRES MAY PICK UP NOISE FROM THE MOTOR POWER WIRES. USE SHIELDED WIRE IF RUNNING THESE ADJACENT.

**MATING CONNECTORS (SUPPLIED BY ALLMOTION)**  
4PIN HIROSE DF11-4DS-2C DIGIKEY P/N H2019  
8 PIN HIROSE DF11-8DS-2C DIGIKEY P/N H2022-ND  
PINS HIROSE DF11-2428SC DIGIKEY P/N H2139

**OPTOS:**  
USE TRANSISTOR TYPE OPTO WITH  $I_c > 1mA$  when  $I_f = 20mA$ .  
EXAMPLE DIGIKEY OPB830W55 or QVA11134 or H21A1  
or HOA1887-012 or HOA1870-33 or OPB830W11

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**EZ BRUSH SERVO WIRING DIAGRAM**

Title		ALLMOTION.COM EZ BRUSH SERVO WIRING DIAGRAM	
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