

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

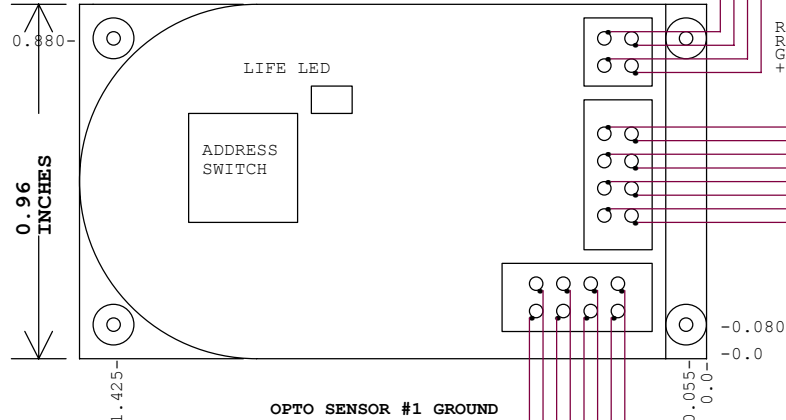
TO PC COM PORT

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. BREAKING OF
CURRENT IN THE INDUCTANCE OF
THE MOTOR GENERATES A HIGH
VOLTAGE ARC, WHICH DAMAGES
THE DRIVE.**

1.5 INCHES
1.4 INCHES
SMALLER VERSION HAS NO MOUNTING HOLES



USE 0-80
OR M1.6
MOUNTING
SCREWS.

LIFE LED

ADDRESS
SWITCH

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

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

+5V
CHAN A
INDEX
CHAN B
GROUND
GROUND

ENCODER

MOTOR+
MOTOR-

MOTOR POWER

DC
BRUSH
MOTOR

0.1uF, 100V 100 OHM, 1/2WATT

PLACE SNUBBER NETWORK NEAR MOTOR TO HANDLE ANY BRUSH ARCING

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	
Size	Document Number	Rev	
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