

9V TO 30V  
POWER  
SUPPLY

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

GROUND  
+9V to +30V

RS485 CONVERTER

DB9 TO COM  
PORT ON PC

TO PC COM PORT

USE 9600 BAUD  
8BIT, NO PARITY,  
1 STOP, NO FLOW  
CTRL.

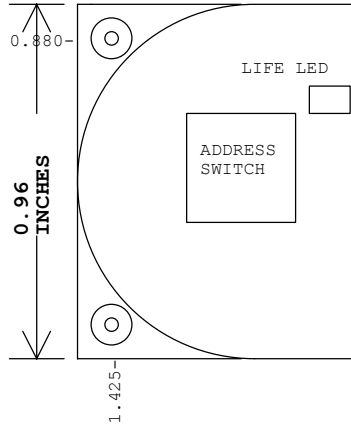
TO OTHER EZ SERVOS  
OR EZ STEPPERS

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

USE 0-80  
OR M1.6  
MOUNTING  
SCREWS.

1.5 INCHES  
STOCK WEB ORDER VERSION WITH MOUNTING HOLES

1.4 INCHES  
SMALLER VERSION HAS NO MOUNTING HOLES



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

1 AMP ON/OFF DRIVER #2 +

SOLENOID, DC MOTOR ETC

1 AMP ON/OFF DRIVER #2 -



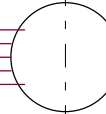
STEPPER MOTOR WINDING A  
STEPPER MOTOR WINDING A  
STEPPER MOTOR WINDING B  
STEPPER MOTOR WINDING B

INSTALL JUMPER TO SEND  
5V TO ENCODER

1 AMP ON/OFF DRIVER #1 +

SOLENOID, DC MOTOR ETC

1 AMP ON/OFF DRIVER #1 -



OPTIONAL ENCODER

OPTIONAL ENCODER CONNECTION

CHAN B CHAN A +5V INDEX GROUND

OPTO SENSOR #1 GROUND

OPTO SENSOR #1 PHOTO TRANSISTOR / ADC INPUT3

OPTO SENSOR #1 LED

OPTO SENSOR #2 GROUND

OPTO SENSOR #2 PHOTO TRANSISTOR / ADC INPUT4

OPTO SENSOR #2 LED

SWITCH #1 CLOSURE TO GROUND INPUT / ADC INPUT1

SWITCH #2 CLOSURE TO GROUND INPUT / ADC INPUT2

**NOTES:**

ENCODER SIGNALS MUST HAVE MINIMUM 4V HIGH LEVEL  
SOME ENCODERS MAY REQUIRE EXTERNAL PULL-UPS TO 5V  
FOR LOW NOISE, DO NOT BUNDLE ENCODER / INPUT WIRES WITH MOTOR WIRES.  
INPUTS HAVE IMPEDANCE EQUIVALENT TO 6.8K OHM PULLUP TO 3.3V  
LED DRIVE LINES HAVE 200 OHM TO 5V INTERNALLY

**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  
LED HAS 200 OHM CURRENT SOURCE RESISTOR BUILT IN ON BOARD  
INPUTS HAVE 6.8K PULLUP BUILT IN ON BOARD

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**EZ10 WIRING DIAGRAM**

Title		ALLMOTION.COM	EZ10 WIRING DIAGRAM
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		Rev	A3