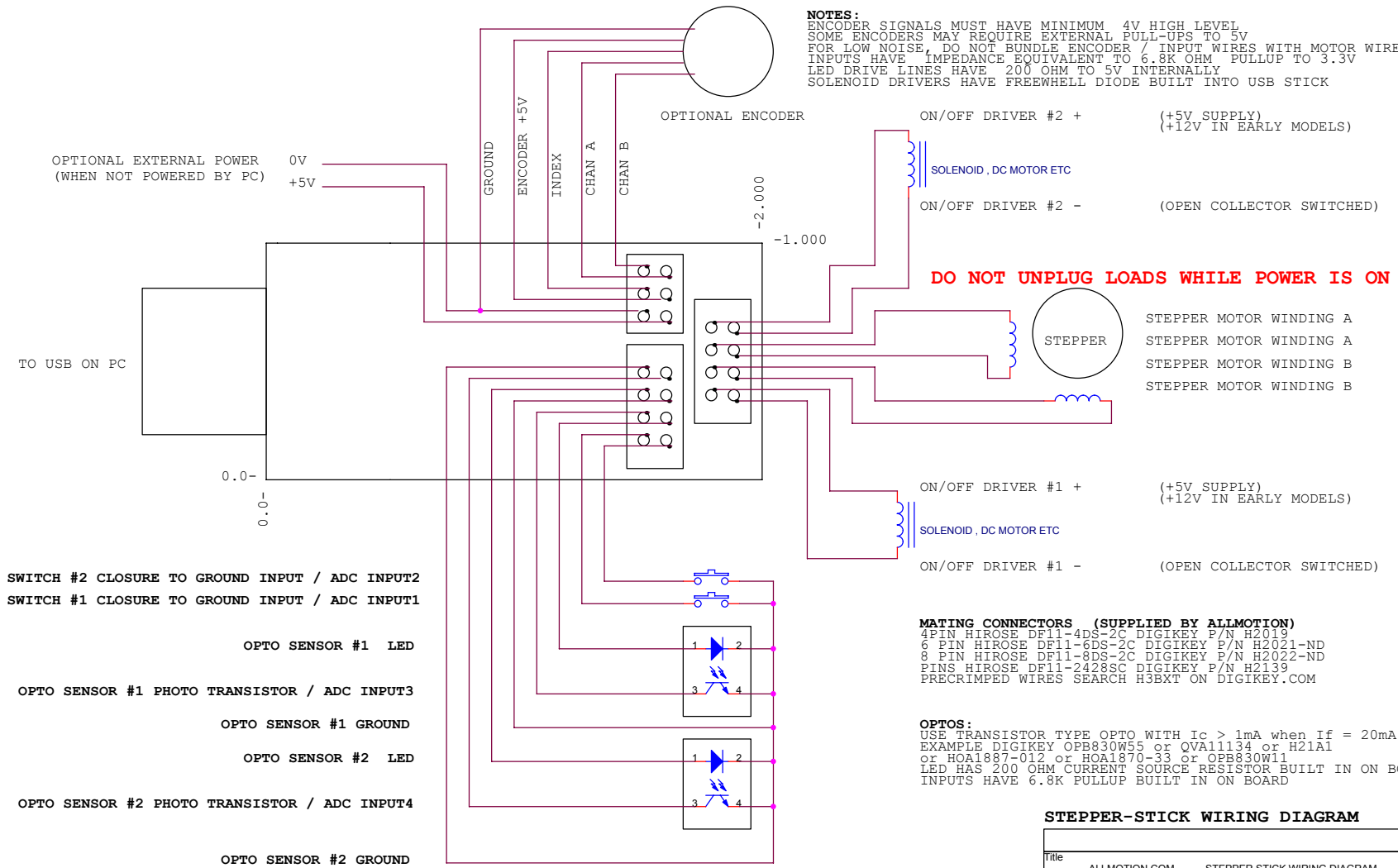


STEPPER STICK DRIVER + CONTROLLER MODEL

OPTIONAL ENCODER CONNECTION



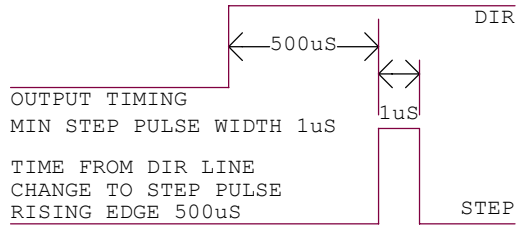
↓ PAGE DOWN FOR STEPPER STICK CONTROLLER ↓

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STEPPER-STICK WIRING DIAGRAM

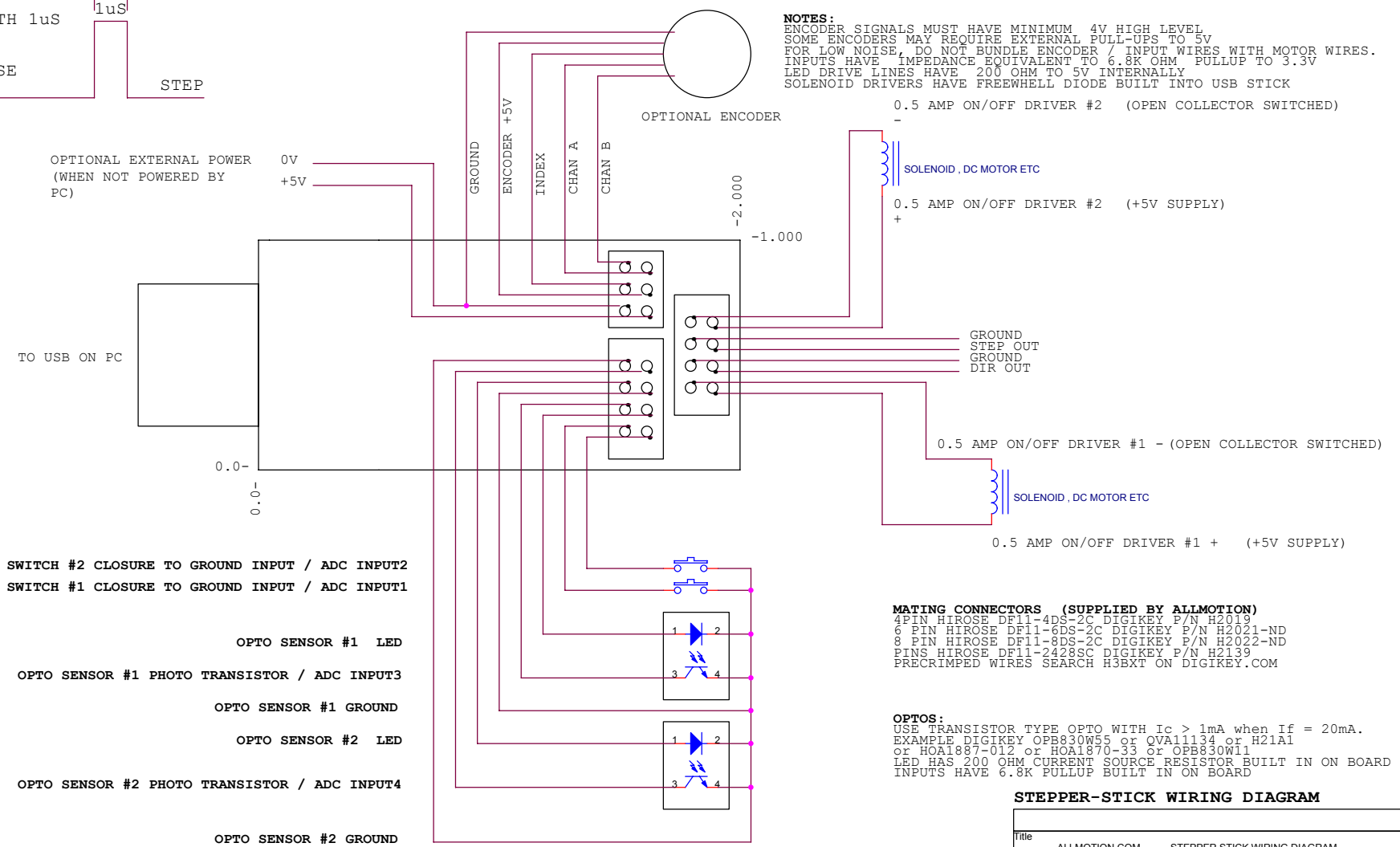
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STEPPER STICK CONTROLLER ONLY MODEL



OPTIONAL ENCODER CONNECTION

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
 INPUTS HAVE IMPEDANCE EQUIVALENT TO 6.8K OHM PULLUP TO 3.3V
 LED DRIVE LINES HAVE 200 OHM TO 5V INTERNALLY
 SOLENOID DRIVERS HAVE FREEWHEEL DIODE BUILT INTO USB STICK



OPTIONAL EXTERNAL POWER
 (WHEN NOT POWERED BY
 PC)
 0V
 +5V

TO USB ON PC

SWITCH #2 CLOSURE TO GROUND INPUT / ADC INPUT2
 SWITCH #1 CLOSURE TO GROUND INPUT / ADC INPUT1

OPTO SENSOR #1 LED
 OPTO SENSOR #1 PHOTO TRANSISTOR / ADC INPUT3
 OPTO SENSOR #1 GROUND
 OPTO SENSOR #2 LED
 OPTO SENSOR #2 PHOTO TRANSISTOR / ADC INPUT4
 OPTO SENSOR #2 GROUND

OPTIONAL I/O CONNECTION

0.5 AMP ON/OFF DRIVER #2 (OPEN COLLECTOR SWITCHED)
 SOLENOID, DC MOTOR ETC
 0.5 AMP ON/OFF DRIVER #2 (+5V SUPPLY)
 0.5 AMP ON/OFF DRIVER #1 - (OPEN COLLECTOR SWITCHED)
 SOLENOID, DC MOTOR ETC
 0.5 AMP ON/OFF DRIVER #1 + (+5V SUPPLY)

MATING CONNECTORS (SUPPLIED BY ALLMOTION)
 4PIN HIROSE DF11-4DS-2C DIGIKEY P/N H2019
 6 PIN HIROSE DF11-6DS-2C DIGIKEY P/N H2021-ND
 8 PIN HIROSE DF11-8DS-2C DIGIKEY P/N H2022-ND
 PINS HIROSE DF11-2428SC DIGIKEY P/N H2139
 PRECRIMPED WIRES SEARCH H3BXT ON DIGIKEY.COM

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

STEPPER-STICK WIRING DIAGRAM

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