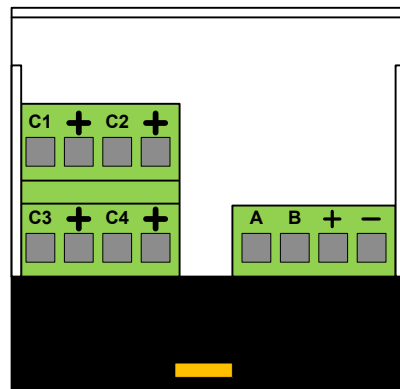


Digital Output Power & Modbus

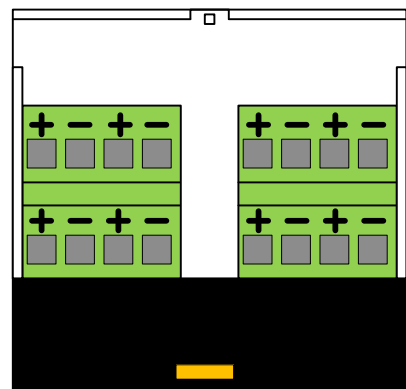
Open Collector #1, #2 #3, #4



Analog Output (0-24mA) Digital Input (0-24VDC)

Output #1, #2 #3, #4

Input #1, #2 #3, #4



| | | | | | | |
|-------|-------------|---------|-----------|--|---|--------|
| Rev | Description | Date | DWN: RD | | Output Trax | |
| | | | CHK'D: RD | | Wiring Diagram | Rev 1 |
| Rev 0 | Release | 3-12-14 | APP'D: JV | | Drawing number: ACC-I/O TRAX2-WIRING-01-SCH | 1 of 1 |

I/O Trax2 Register Map

| Address | Function | Type | Access | Notes |
|---------------|--------------------|------------|------------|--|
| 40001 | Digital Out 1 | Integer 16 | Read/Write | Digital Out On = (xxxxxx1) Digital Out Off = (xxxxxx0) |
| 40002 | Digital Out 2 | Integer 16 | Read/Write | Digital Out On = (xxxxxx1) Digital Out Off = (xxxxxx0) |
| 40003 | Digital Out 3 | Integer 16 | Read/Write | Digital Out On = (xxxxxx1) Digital Out Off = (xxxxxx0) |
| 40004 | Digital Out 4 | Integer 16 | Read/Write | Digital Out On = (xxxxxx1) Digital Out Off = (xxxxxx0) |
| 40005 | Digital In 1 | Integer 16 | Read | Digital In On = (xxxxxx0) Digital In Off = (xxxxxx1) |
| 40006 | Digital In 2 | Integer 16 | Read | Digital In On = (xxxxxx0) Digital In Off = (xxxxxx1) |
| 40007 | Digital In 3 | Integer 16 | Read | Digital In On = (xxxxxx0) Digital In Off = (xxxxxx1) |
| 40008 | Digital In 4 | Integer 16 | Read | Digital In On = (xxxxxx0) Digital In Off = (xxxxxx1) |
| 40009 | Analog Out 1 | Integer 16 | Read/Write | Divide by 1000 for mA reading |
| 40010 | Analog Out 2 | Integer 16 | Read/Write | Divide by 1000 for mA reading |
| 40011 | Analog Out 3 | Integer 16 | Read/Write | Divide by 1000 for mA reading |
| 40012 | Analog Out 4 | Integer 16 | Read/Write | Divide by 1000 for mA reading |
| 40013 | All Digital Outs | Integer 16 | Read/Write | Digital Out 1 on & 3 on = (xxxx0101) All Digital Out Off = (xxxx0000) |
| 40014 | All Digital Ins | Integer 16 | Read | Digital In 1 & 3 On = (xxxx1010) All Digital In Off = (xxxx1111) |
| 40015 & 40016 | Analog Out #1 (mA) | Float 32 | Read/Write | Must read 40017 & 40018 |
| 40017 & 40018 | Analog Out #2 (mA) | Float 32 | Read/Write | Must read 40019 & 40020 |
| 40019 & 40020 | Analog Out #3 (mA) | Float 32 | Read/Write | Must read 40021 & 40022 |
| 40021 & 40022 | Analog Out #4 (mA) | Float 32 | Read/Write | Must read 40023 & 40024 |
| 40023 | Heartbeat | Integer 16 | Read | Increments every second up to 65535 |

x = doesn't matter

DIP Switch Settings

Switch 1 (Modbus ASCII or RTU)

0 = Modbus ASCII (7 data bits)

1 = Modbus RTU (8 data bits)

Switch 2, 3 (Parity)

00 = Odd Parity

01 = Even Parity

10 = No Parity, 1 Stop bits (ASCII 2 stop bits)

11 = No Parity, 2 Stop bits

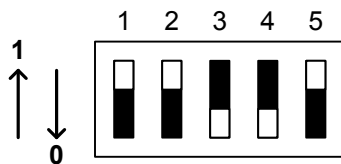
Switch 4, 5 (Baud Rate)

00 = 4800

01 = 9600

10 = 19200

11 = 38400



Modbus Address Setting

The Modbus address is set by using the hexadecimal switches on the front.

To determine the address chosen, use the formula **(S2 x 16) + S1 = Modbus Address**

In hexadecimal: A = 10

B = 11

C = 12

D = 13

E = 14

F = 15

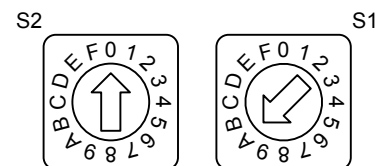
An Example:


S2 = 0, S1 = A:

(0 x 16) + 10 = address 10

S2 = 1, S1 = 8:

(1 x 16) + 8 = address 24



| Rev | Description | Date | DWN: RD |  | I/OTrax2 | |
|-------|-------------|---------|-----------|--|------------------|------------------------|
| | | | CHK'D: RD | | Modbus Registers | Rev 0 |
| | | | APP'D: JV | | Drawing number | ACC-I/OTRAX2-QUKREF-01 |
| Rev 0 | Release | 3-12-14 | | | 1 of 1 | |

Specifications

Power Input:

10 to 33VDC, 100mA at 24V (2.4W)

Digital Outputs:

Max Voltage: 40V

Max Current: 0.5A

Digital Inputs:

Range: 0VDC to 27VDC

Input on (1) = $\geq 3\text{VDC}$

Input off (0) = $\leq 2\text{VDC}$

Absolute maximum: 30VDC

Current Outputs:

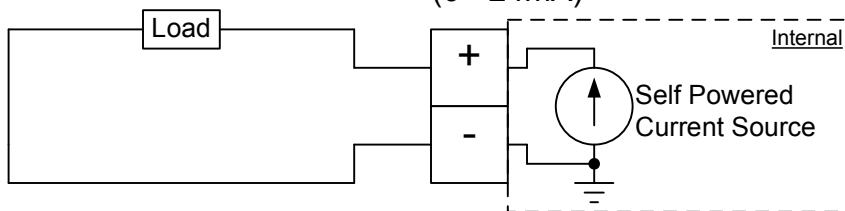
Self Powered

Range: 0mA to 24mA

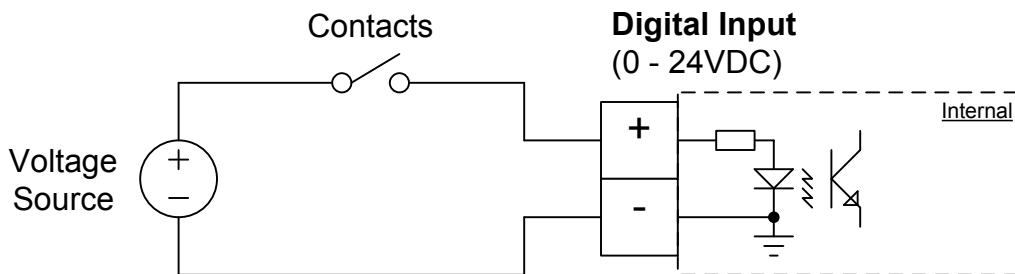
Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

Wiring Examples

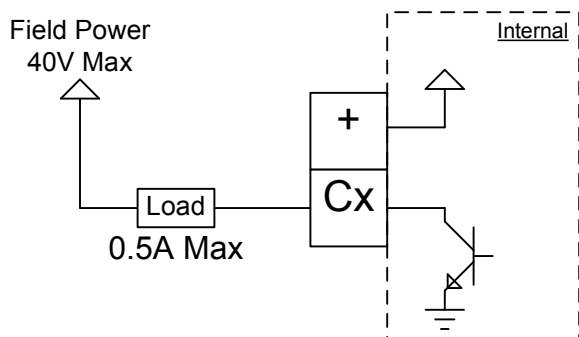
Analog Output (0 - 24mA)



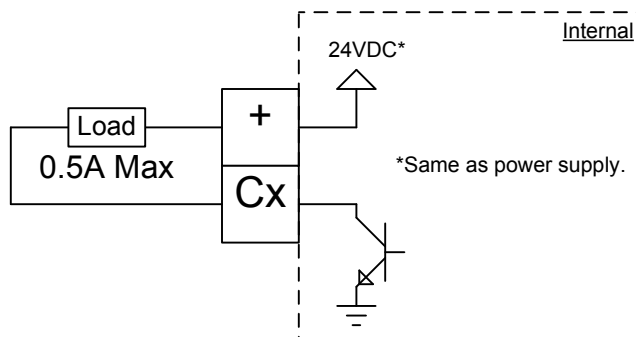
Digital Input (0 - 24VDC)




Digital Output (Open Collector)



Digital Output (Open Collector)



| Rev | Description | Date | DWN: RD |  | I/OTrax2 | |
|-------|-------------|---------|-----------|--|---------------------------------------|--------|
| | | | CHK'D: RD | | Specs & Wiring examples | Rev 0 |
| | | | APP'D: JV | | Drawing number ACC-I/OTRAX2-QUKREF-01 | 1 of 1 |
| Rev 0 | Release | 3-12-14 | | | | |