



Syvecs X10

Outputs

10 Low side Outputs (circa 15A each, Surge to 30A)

4 Half Bridge Outputs (combinable for 2 Full Bridges and a lose of 2 inputs)

Inputs

10 Analogue or switch inputs (0-5V, Thermistor or switch)

6 of the inputs capable of speed measurement (Bipolar, Unipolar)

Interfaces

Ethernet for pc configuration and monitoring connection

CAN 2.0B interface for communication with other controllers or logging systems

Power Supply

6 to 26V input voltage range

Physical

35 way AMP Ampseal male connector

PCB 130 x 115mm

Syvecs X10 Pinouts

| | | | | |
|--------------|---------------------------|--------------|-----------------|-----------------|
| Pin1 | Output1 | Pin16 | Input 4 | - BIpolar |
| Pin2 | Output 1 (Linked to pin1) | Pin17 | Input 5 | - BIpolar |
| Pin3 | Output 2 | Pin18 | Input 6 | - BIpolar |
| Pin4 | H Bridge 1 | Pin19 | Input 7 | |
| Pin5 | Output 3 | Pin20 | Input 8 | |
| Pin6 | Output 4 | Pin21 | Input 9 | Or Half Bridge3 |
| Pin7 | Output 5 | Pin22 | Input 10 | Or Half Bridge3 |
| Pin8 | Output 6 | Pin23 | LAN RX+ | White/Orange |
| Pin9 | Output 7 | Pin24 | AN Ground | |
| Pin10 | Output 8 | Pin25 | 5V Out | |
| Pin11 | Output 9 | Pin26 | Can H1 | |
| Pin12 | Output10 | Pin27 | Can L1 | |
| Pin13 | Input 1 | Pin28 | Can H2 | |
| Pin14 | Input 2 | Pin29 | Can L2 | |
| Pin15 | Input 3 | Pin30 | H Bridge 2 | |
| | | Pin31 | LAN TX - | Green/White |
| | | Pin32 | LAN TX + | White/Green |
| | | Pin33 | LAN RX - | Orange/White |
| | | Pin34 | 12V Supply VBAT | |
| | | Pin35 | Power Ground | |

Requires termination resistors of 120ohm between Can L1 and Can H1 if slaving to a S6 or S8

Connection to ECU

S6 – Can H1 X10 to CanH On S6, Can L1 on X10 to CanL on S6

S8 – Can H1 X10 to Can2H On S8, Can L1 on X10 to Can2L on S8

S12 – Can H1 X10 to Can2H On S12, Can L1 on X10 to Can2L on S12

H Bridge assigning is Scal when using X10 Expander

- Slave1 Fuel11 is H Bridge1 (pin4 on x10)
- Slave1 Fuel12 is H Bridge2 (Pin30 on X10)
- Slave1 Fuel13 is H Bridge3 (Pin21 on X10)
- Slave1 Fuel14 is H Bridge4 (Pin22 on X10)

Full Bridge Assigning in Scal when using X10 Expander

- Slave1 Fuel11 is for Full Bridge1 (H Bridge 1&2)
- Slave1 Fuel13 is for Full Bridge2 (H Bridge 3&4)