

Wiring Information:**Connector 2***Mating Connector: 1703998-1, Hood 1703997-1*

Pin	Gauge	Signal Name	Signal Notes
1	-	DO NOT CONNECT	
2	-	DO NOT CONNECT	
3	-	DO NOT CONNECT	
4	-	DO NOT CONNECT	
5	-	DO NOT CONNECT	
6	-	DO NOT CONNECT	
7	-	DO NOT CONNECT	
8	-	DO NOT CONNECT	
9	-	DO NOT CONNECT	
10	-	DO NOT CONNECT	
11	-	DO NOT CONNECT	
12	-	DO NOT CONNECT	
13	-	DO NOT CONNECT	
14	-	DO NOT CONNECT	
15	-	DO NOT CONNECT	
16	24-16AWG	Output 34	High Side - 15Amps
17	24-16AWG	Output 32	High Side - 15Amps
18	24-16AWG	Output 30	High Side - 15Amps
19	24-16AWG	Output 28	High Side - 15Amps
20	24-16AWG	Output 26	High Side - 15Amps
21	24-16AWG	Output 24	High Side - 15Amps
22	24-16AWG	Output 22	High Side - 15Amps
23	24-16AWG	Low Output 11	Low Side, Low Side PWM - 8 Amps
24	-	DO NOT CONNECT	
25	-	DO NOT CONNECT	
26	-	DO NOT CONNECT	
27	-	DO NOT CONNECT	
28	-	DO NOT CONNECT	
29	-	DO NOT CONNECT	
30	-	DO NOT CONNECT	
31	-	DO NOT CONNECT	
32	-	DO NOT CONNECT	
33	-	DO NOT CONNECT	
34	-	DO NOT CONNECT	
35	-	DO NOT CONNECT	
36	-	DO NOT CONNECT	
37	-	DO NOT CONNECT	
38	-	DO NOT CONNECT	
39	24-16AWG	Output 33	High Side - 15Amps
40	24-16AWG	Output 31	High Side - 15Amps
41	24-16AWG	Output 29	High Side - 15Amps
42	24-16AWG	Output 27	High Side - 15Amps
43	24-16AWG	Output 25	High Side - 15Amps
44	24-16AWG	Output 23	High Side - 15Amps
45	24-16AWG	Output 21	High Side - 15Amps
46	24-16AWG	Low Output 12	Low Side, Low Side PWM - Amps

Connector 2

Continued...

Pin	Gauge	Signal Name	Signal Notes
47	24-16AWG	INPUT 01	Analogue or frequency; 0-5V, -5V to +5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
48	24-16AWG	INPUT #03	Analogue or frequency; 0-5V, -5V to +5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
49	24-16AWG	INPUT #05	Analogue or frequency; 0-5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
50	24-16AWG	INPUT #07	Analogue or frequency; 0-5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
51	24-16AWG	INPUT #09	Analogue 0-5V, 3kΩ programmable pullup to 5V
52	24-16AWG	INPUT #11	Analogue 0-5V, 3kΩ programmable pullup to 5V
53	24-16AWG	INPUT 13	Analogue 0-5V, 3kΩ programmable pullup to 5V, Wake ⁽⁵⁾
54	24-16AWG	INPUT 15	Analogue 0-5V, 3kΩ programmable pullup to 5V, Wake ⁽⁵⁾
55	24-16AWG	SENSOR GND	Protected sensor ground
56	24-16AWG	5V OUT	Regulated 5V sensor supply rail
57	24-16AWG	LOGIC POWER IN	See Notes Below
58	24-16AWG	WARNING AND RESET SW	Warning output for an LED to ground. Short to ground for manual reset.
59	24-16AWG	RS232 RX	RS232 receive
60	24-16AWG	CAN #03 HI	NOT CURRENTLY IN USE
61	24-16AWG	CAN #02 HI	ECU Slave (terminated)
62	24-16AWG	CAN #01 HI	CA communication port 120Ω software selectable termination ⁽³⁾
63	24-16AWG	ETHERNET2 RX+	Ethernet communication port 2
64	24-16AWG	ETHERNET2 TX+	Ethernet communication port 2
65	24-16AWG	ETHERNET1 RX+	Ethernet communication port 1
66	24-16AWG	ETHERNET1 TX+	Ethernet communication port 1
67	24-16AWG	Power Ground	Negative battery supply
68	24-16AWG	Low Output 13	Low Side, Low Side PWM – 8 Amps
69	24-16AWG	Low Output 14	Low Side, Low Side PWM – 8
70	24-16AWG	INPUT #02	Analogue or frequency; 0-5V, -5V to +5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
71	24-16AWG	INPUT #04	Analogue or frequency; 0-5V, -5V to +5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
72	24-16AWG	INPUT #06	Analogue or frequency; 0-5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
73	24-16AWG	INPUT #08	Analogue or frequency; 0-5V, 3kΩ programmable pullup to 5V ⁽⁴⁾
74	24-16AWG	INPUT 10	Analogue 0-5V, 3kΩ programmable pullup to 5V
75	24-16AWG	INPUT 12	Analogue 0-5V, 3kΩ programmable pullup to 5V
76	24-16AWG	INPUT 14	Analogue 0-5V, 3kΩ programmable pullup to 5V, Wake ⁽⁵⁾
77	24-16AWG	INPUT 16	Analogue 0-5V, 3kΩ programmable pullup to 5V, Wake ⁽⁵⁾
78	24-16AWG	SENSOR GND	Protected sensor ground
79	24-16AWG	Power Ground	Negative battery supply
80	24-16AWG	WAKE P	See notes below
81	24-16AWG	LIN	NOT CURRENTLY IN USE
82	24-16AWG	RS232 TX	RS232 transmit
83	24-16AWG	CAN #03 LO	NOT CURRENTLY IN USE
84	24-16AWG	CAN #02 LO	ECU Slave (terminated)
85	24-16AWG	CAN #01 LO	CA communication port 120Ω software selectable termination ⁽³⁾
86	24-16AWG	ETHERNET2 RX-	Ethernet communication port 2
87	24-16AWG	ETHERNET2 TX-	Ethernet communication port 2
88	24-16AWG	ETHERNET1 RX-	Ethernet communication port 1
89	24-16AWG	ETHERNET1 TX-	Ethernet communication port 1
90	24-16AWG	Power Ground	Negative battery supply
91	24-16AWG	Power Ground	Negative battery supply
92	24-16AWG	Output 21D	High Side with Diode

Logic Power In

Logic power in exists to allow the PDU electronics supply to be protected from voltage drops due to large current demand at the positive power connector. The idea is to run a small (~0.5A) wire back to the master or the battery separately from the main power connection. The logic will not see the voltage drop caused on the main power line by big current spikes and will therefore be less likely to be reset by them. This also allows the PDU logic to be alive (for communications and programming) while the main power connection is disconnected, which can be useful in-car and also for bench power-up looms.

WakeUP Pin

Wake pin is active-high, will always turn the device on (unlike wake on inputs 13..16 which are optional wake). Does not need to be connected if 'always on' is set in the power config in PduSetup; should not be connected if other wake source is used like wake-on-Can

Footnotes:

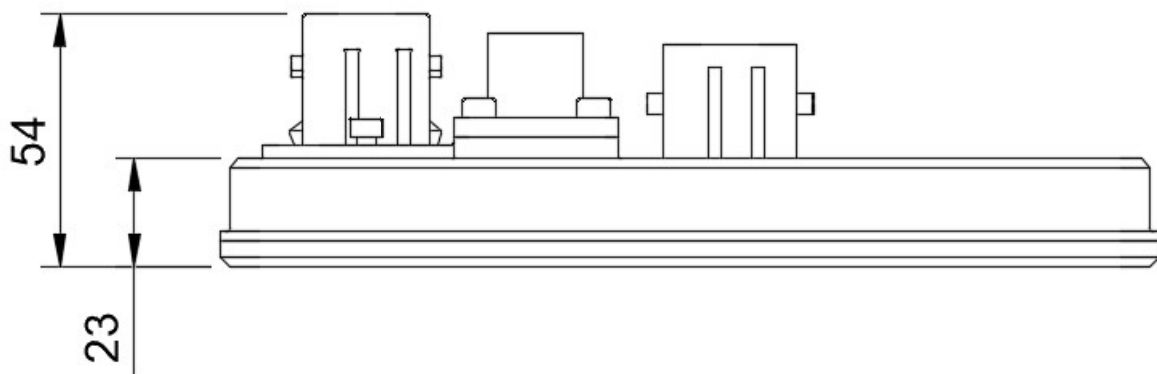
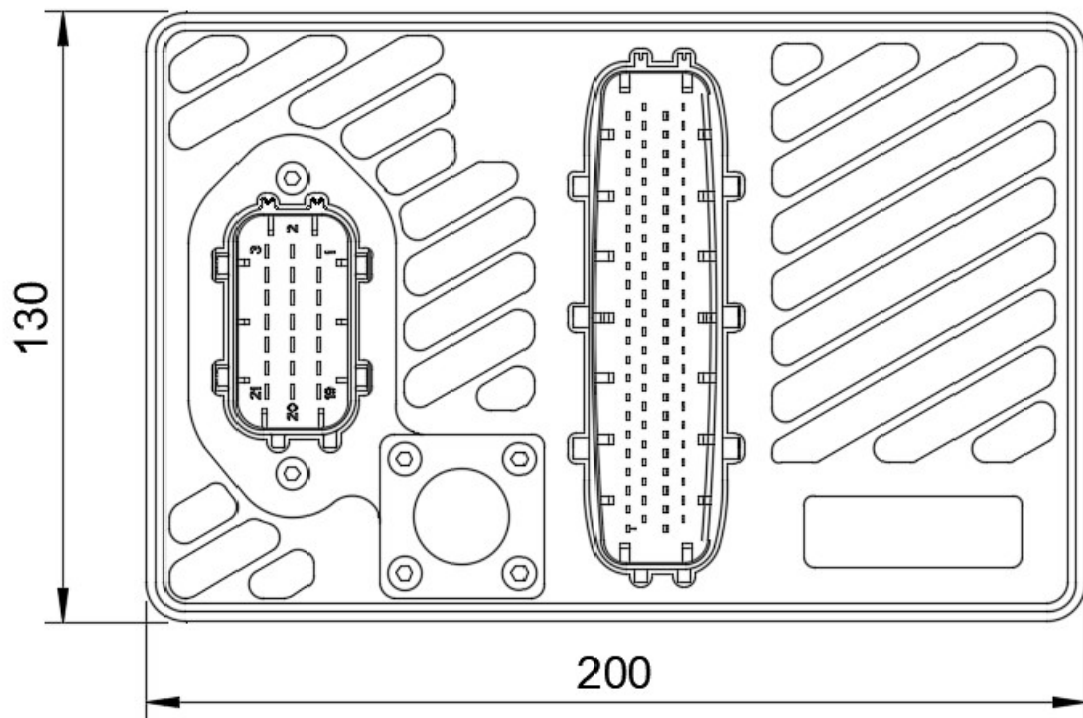
⁽¹⁾PWM, Half Bridge and Full Bridge via ECU slaving only.

⁽²⁾Full Bridge control is on adjacent pairs only (1+2, 3+4, 5+6, 7+8, 9+10).

⁽³⁾Only active when not in sleep mode. If waking on CAN external termination will be required.

⁽⁴⁾Bipolar and Frequency inputs via ECU slaving only.

⁽⁵⁾Can be calibrated to bring unit out of sleep mode when driven high. Dedicated wake pin always active.



Warranty and Servicing:

- This equipment comes with a 1 year warranty against manufacturing defects and failures however misuse or damage will not be covered under warranty.
- This PDU contains a battery which can be returned to Syvecs for a replacement, a charge may be made for this service.