

Haltech Nexus R3 pinout

ecurecovery.com/pinouts/haltech/nexus-r3 · Every pin checked against 2 Haltech documents · data checked 2026-11-01

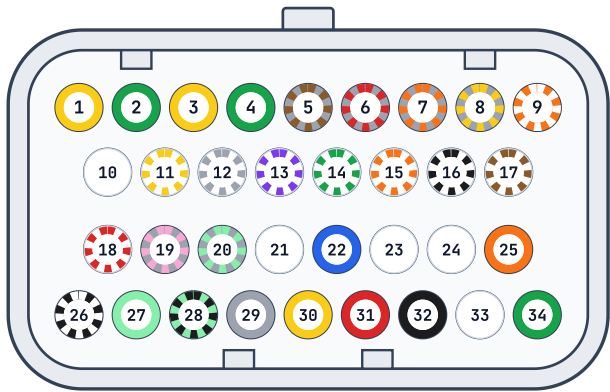
Connector A · 34-pin

LOOKING INTO THE CONNECTOR ON THE ECU



Connector C · 34-pin

LOOKING INTO THE CONNECTOR ON THE ECU



Connector E · 4-pin

LOOKING INTO THE CONNECTOR ON THE ECU



Haltech Nexus R3 connector A pinout (34-pin)

Pin	Function	Wire
A1	Injector 1	 L Blue
A2	Injector 2	 L/B Blue with black stripe
A3	Injector 3	 L/BR Blue with brown stripe
A4	Injector 4	 L/R Blue with red stripe
A5	Injector 5	 L/O Blue with orange stripe
A6	Injector 6	 L/Y Blue with yellow stripe
A7	Injector 7	 L/G Blue with green stripe
A8	Injector 8	 L/V Blue with violet stripe
A9	DPO 1	 V/B Violet with black stripe
A10	Battery Ground Output	 B Black
A11	Battery Ground Output	 B Black
A12	DPO 2	 V/BR Violet with brown stripe
A13	Ignition Switch Input	 P Pink
A14	DPO 3	 V/R Violet with red stripe
A15	DPO 4	 V/O Violet with orange stripe

Pin	Function	Wire
A16	DPO 5	 V/Y Violet with yellow stripe
A17	DPO 6	 V/G Violet with green stripe
A18	+12V (HBO 5, see page 12)	 P/R Pink with red stripe
A19	HBO 1	 BR/B Brown with black stripe
A20	HBO 2	 BR/R Brown with red stripe
A21	HBO 3	 BR/G Brown with green stripe
A22	HBO 4	 BR/P Brown with pink stripe
A23	CAN1 H	 W White
A24	CAN1 L	 L Blue
A25	+12V (HBO 6, see page 12)	 P/BR Pink with brown stripe
A26	+12V Low Current Output	 R/L Red with blue stripe
A27	Ignition 1	 Y/B Yellow with black stripe
A28	Ignition 2	 Y/R Yellow with red stripe
A29	Ignition 3	 Y/O Yellow with orange stripe
A30	Ignition 4	 Y/G Yellow with green stripe
A31	Ignition 5	 Y/BR Yellow with brown stripe
A32	Ignition 6	 Y/L Yellow with blue stripe
A33	Ignition 7	 Y/V Yellow with violet stripe
A34	Ignition 8	 Y/GY Yellow with grey stripe

Haltech Nexus R3 connector C pinout (34-pin)

Pin	Function	Wire
C1	Trigger +	 Y Yellow
C2	Trigger -	 G Green
C3	Home +	 Y Yellow
C4	Home -	 G Green
C5	SPI 1	 GY/BR Grey with brown stripe
C6	SPI 2	 GY/R Grey with red stripe
C7	SPI 3	 GY/O Grey with orange stripe
C8	SPI 4	 GY/Y Grey with yellow stripe
C9	+8V Sensor Power	 O/W Orange with white stripe
C10	AVI 1	 W White
C11	AVI 2	 W/Y White with yellow stripe
C12	AVI 3	 W/GY White with grey stripe
C13	AVI 4	 W/V White with violet stripe
C14	AVI 5	 W/G White with green stripe
C15	AVI 6	 W/O White with orange stripe
C16	AVI 7	 W/B White with black stripe
C17	AVI 8	 W/BR White with brown stripe
C18	AVI 9	 W/R White with red stripe
C19	SPI 5	 GY/P Grey with pink stripe
C20	SPI 6	 GY/LG Grey with light green stripe
C21	CAN2 H	 W White
C22	CAN2 L	 L Blue
C23	Knock 1	 W White Shielded
C24	Knock 2	 W White Shielded
C25	+5V Sensor Power	 O Orange
C26	Signal Ground	 B/W Black with white stripe
C27	AVI 10	 LG Light green
C28	AVI 11	 LG/B Light green with black stripe

Pin	Function	Wire
C29	1: WB Heater +	 GY Grey
C30	2: WB Input	 Y Yellow
C31	3: WB Pump	 R Red
C32	4: WB Nernst	 B Black
C33	5: WB Heater -	 W White
C34	6: WB Cal	 G Green

Haltech Nexus R3 connector E pinout (4-pin)

Pin	Function	Wire
E1	+12V Injector (25A-HCO 1)	 R/L Red with blue stripe
E2	+12V Ignition (25A-HCO 2)	 R/Y Red with yellow stripe
E3	25A-HCO 3	 R/O Red with orange stripe
E4	25A-HCO 4	 R/G Red with green stripe

Where this comes from

Haltech harness quick start guide

[Nexus R3 Universal Wire-in Harness, Quick Start Guide \(Haltech\)](#)

Haltech wiring diagram

[Nexus R3 VCU Wiring Diagram \(Haltech HT-193000, document revision 1.2\)](#)

[Nexus R3 VCU Wiring Diagram \(Haltech, rev 1.2\) - rows read from the drawing](#)

Haltech wire colour codes

 B = Black  BR = Brown  G = Green  GY = Grey  L = Blue  O = Orange  P = Pink
 R = Red  V = Violet  Y = Yellow  W = White  LG = Light green

Two letters: the first is the wire colour, the second is the stripe.