

Ez-b Powered By Roomba

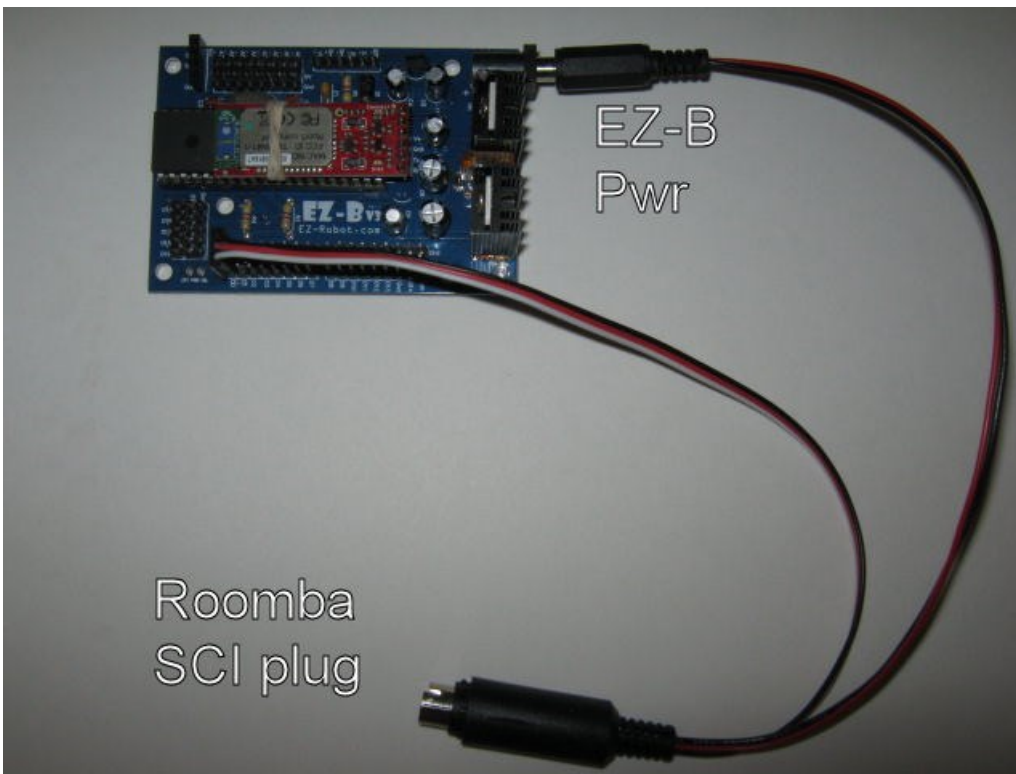
Here is one way to eliminate the need for an additional battery to power the EZ-B. The Roomba SCI 7-pin mini din connector provides unregulated battery power at 1/2 amp directly to pins 6 & 7 (Gnd) and pins 1 & 2 (Positive battery) Normally on a fully charged Roomba battery the voltage can be as much as 17 vdc. Since the EZ-B (3) can accept up to 17 vdc direct Roomba battery power can be used to run...

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Step 1

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Normally on a fully charged Roomba battery the voltage can be as much as 17 vdc. Since the EZ-B (3) can accept up to 17 vdc direct Roomba battery power can be used to run the Roomba and the EZ-B as well. Possible limitations come to play if power needed for goodies connected to the EZ-B exceed 1/2 amp. There is a resettable fuse on the Roomba PCB that will open if the 1/2 amp of current is exceeded. Here is a photo of a cable used to power the EZ-B and also communicate with the Roomba via D0.

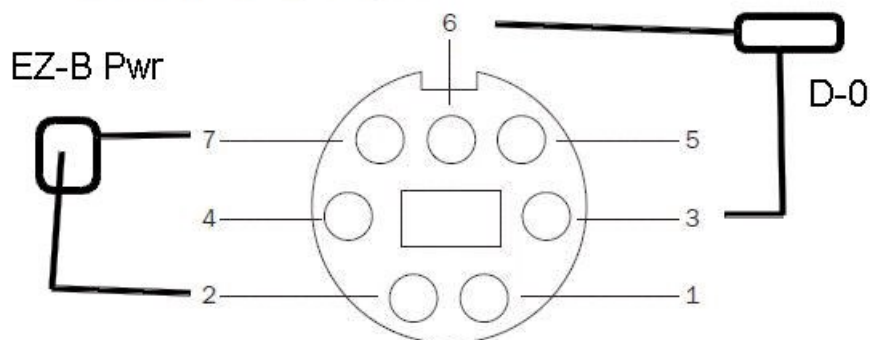


NOTE: Up to 22 vdc can be on the same power terminals if the Roomba is in a charging state. It is advisable to disconnect the EZ-B when charging the battery.

Here is a quick reference of the pin number assignments and corresponding plugs.

ROOMBA'S EXTERNAL SERIAL PORT MINI-DIN CONNECTOR PINOUT

This diagram shows the pin-out of the top view of the female connector in Roomba. Note that pins 5, 6, and 7 are towards the outside circumference of Roomba.



Pin	Name	Description
1	Vpwr	Roomba battery + (unregulated)
2	Vpwr	Roomba battery + (unregulated)
3	RXD	0 – 5V Serial input to Roomba
4	TXD	0 – 5V Serial output from Roomba
5	DD	Device Detect input (active low) – used to wake up Roomba from sleep
6	GND	Roomba battery ground
7	GND	Roomba battery ground