Stepper Pack

Computer Control for Stepper Motors Made Easy

Available exclusively from PC Control

   If you have never used a stepper motor before, let alone control one from a PC, then the "Stepper Pack" provides an easy "connect-and-go" solution. Once you have the Stepper Motor running under PC control the knowledge and confidence you gain by actually using a Stepper Motor is invaluable in applying those techniques to a wide range of applications. The Stepper Motor supplied is one of the most popular types on the market and understanding its principles of operation provides a solid basis for using many other types.

- For those who are already familiar with stepper motors, the stepper pack offers a very convenient way of adding a stepper to your PC application.

- For programmers, the supplied DLL means you have a stepper motor that is instantly controllable from within your own program (Visual Basic, C, C++ etc…)

All that is required to get the stepper up and running under PC control are eight AA size batteries and a small screwdriver. No soldering is required. All you need to do is connect the stepper motor wires to the StepperBee terminals and the battery power pack, then connect the StepperBee to a free USB port using the lead supplied and install the software.

It's that simple !

The pack contents are: 1x StepperBee with AutoStep Software, 1x 12v Stepper Motor(4-phase, unipolar, 1.8 Degree, medium torque), 2x Switched Battery Holder, 1x USB Cable and 1xTeminal Strip.
(8x AA batteries are required and are not included)

The circuit diagram for this arrangement is shown below
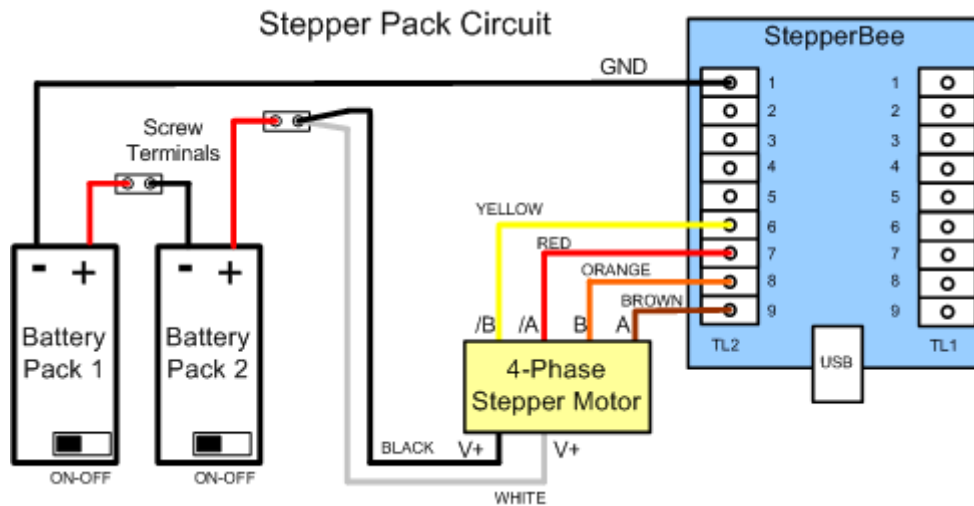
For ease of identification, the stepper motor has colour coded wires which correspond to those indicated in the circuit diagram above. The battery packs also use the traditional black for negative and red for positive terminals. It should be noted that each of the two battery packs supplied have their own on-off switch. Both packs must be switched on to operate the stepper motor. For those not familiar with circuit diagrams the following photo illustrates the connections.
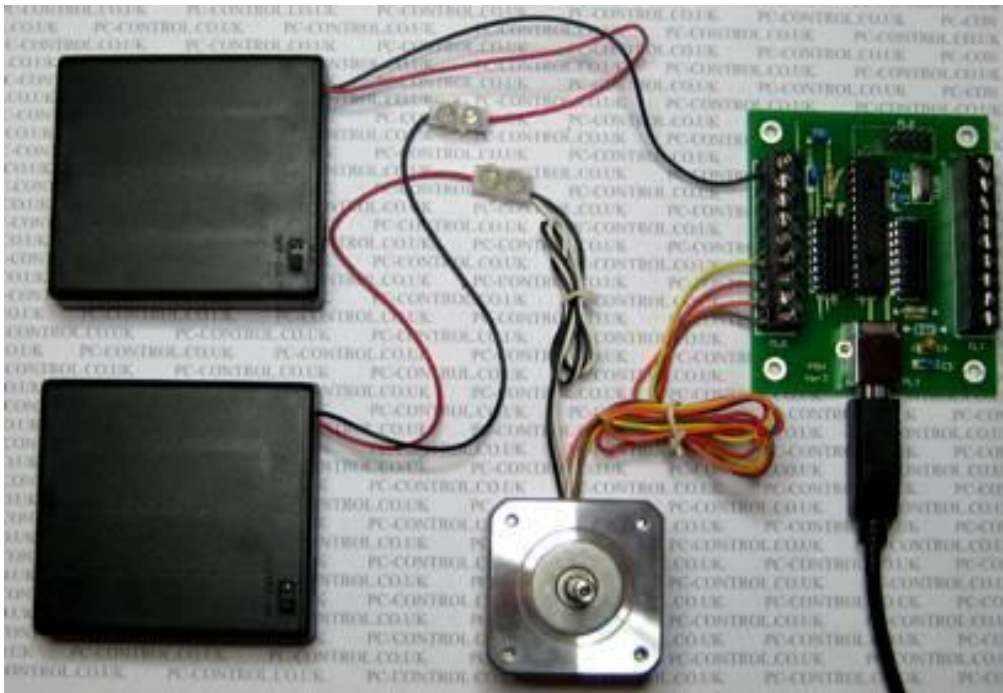
For details of installing the AutoStep software and operating the stepper motor from it, please refer to the StepperBee manual.

Note: The stepper bee supplied with the stepper pack is the new style stepper bee which does not have and does not require the heatsinks fitted to the driver chips as pictured above.

Stepper Pack Upgrade Options 1 and 2.

The above description and wiring details apply to the standard stepper pack. If you have purchased one of the two available upgrade options, the following notes will apply…

Note 1: With option 1 upgrade you will have the standard stepper bee board replaced by a stepper bee+. Although the board looks quite different to the standard stepper bee, the terminal connections are exactly the same and the wiring to the standard stepper motor is exactly as described above.

Note 2: With option 2 upgrade, the stepper bee is replaced with a stepper bee + **and** the standard stepper motor is replaced with a large stepper motor. Although the terminals on the stepper bee+ remain the same, the colour of the wires on the large stepper motor are different. These are shown below together with the respective connection terminals on the stepper bee +. Note that the type of motor supplied in the stepper pack may be either a single or twin shaft type. The type currently being supplied will be stated at time of purchase. Connections for both types are given below.

Large Motor with Single Shaft (MOT004)

Lead Identification		Stepper Bee+ Connections	
		TL1 (Motor 2)	TL2 (Motor 1)
Phase A	Red	7	9
V+ (12v)	White	Ext +12v	Ext +12v
Phase /A	Blue	5	7
Phase B	Green	6	8
V+ (12v)	Black	Ext +12v	Ext +12v
Phase /B	Brown	4	6

Large Motor with Twin Shaft (MOT005)

Lead Identification		Stepper Bee+ Connections	
		TL1 (Motor 2)	TL2 (Motor 1)
Phase A	Black	7	9
Phase B	Red	6	8
Phase C	Orange	5	7
Phase D	Yellow	4	6
/A	White	Ext +12v	Ext +12v
/B	Grey	Ext +12v	Ext +12v
/C	Brown	Ext +12v	Ext +12v
/D	Blue	Ext +12v	Ext +12v

In addition, please remember that the negative terminal of the battery pack should still be connected to the 0v (GND) terminal on the stepper bee+ as before.

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7. These terms are an important part of the full terms and conditions of business as published on the website at www.pc-control.co.uk/general-terms.htm which also apply.

If you cannot agree to the terms and conditions of use of the Stepper Pack then you should return the Stepper Pack to the supplier within 7 days of receipt to receive a refund. Your use of the board or the associated software in any way whatsoever will be regarded as an acceptance of these terms and conditions.