

EN003 - Connecting the ncPod to the DC-05 DigiSpeed-NC™

The DC-05 DigiSpeed-NC is a modified version of the popular DigiSpeed-GX. It is designed to interface between the ncPod USB controller and the KBIC style DC motor controllers. The DigiSpeed-NC is suitable for use with a range of motor controllers and VFDs.

The ncPod provides a 75KHz PWM signal for spindle control. The duty cycle of this signal represents 0% - 100% of the maximum spindle speed. The 75KHz frequency of this signal is too high for other versions of the DigiSpeed range, and therefore the ncPod is only compatible with the DigiSpeed-NC.

The DigiSpeed-NC is connected to the ncPod as shown in Illustration 1. Use the table below to identify the connector pin outs.

DigiSpeed	Signal	ncPod
J1-+5V	+5V supply	Motor B-4 ¹
J1-VIn	PWM Signal	Output A-1 ²
J1-Gnd	GND (0 VDC)	Output A-2

Table 1: DigiSpeed-ncPod Connection

The DigiSpeed-NC is connected to the KBIC controller as shown in Illustration 1. Use the table below to identify the connector pin outs.

DigiSpeed	Signal	ncPod
J2-AV+	+Analog supply	P3
J2-VOut	PWM Signal	P3
J2-AGnd	Analog Ground	P1

Table 2: DigiSpeed-ncPod Connection

For more information consult the;

1. DigiSpeed-GX user manual,
2. ncPod manual and
3. KBIC motor controller manual

1 +5v may be obtained from any of the spare +5v pins on the ncPod
 2 Pin 1 of the connector has a square pad on the overlay. The remaining pins are numbered sequentially.

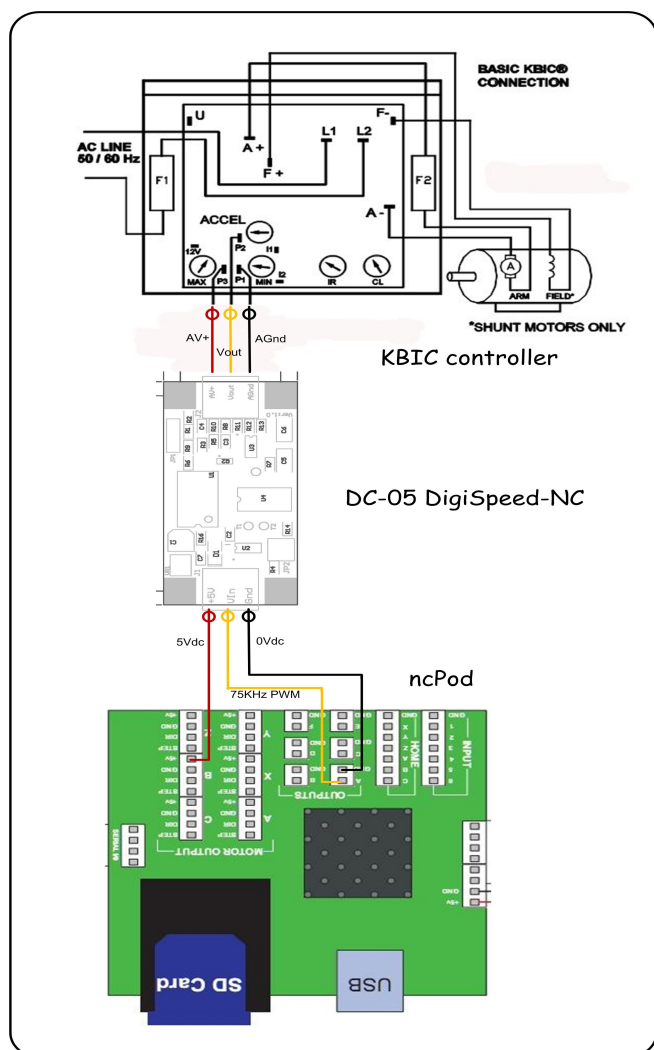


Illustration 1: Sensor Connection to DigiSpeed-XL

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