

## ➤ +TTL33 Differential high-speed encoder card wiring guide

1. Connect the shielded cables of the differential encoder to the DB9 male port A+/A-, B+/B-, Z+/Z-, 5V, GND of the PG card respectively, and connect the shielded cable to the PE port of the DB9 male connector, as shown in Figure 2. . (The PE port of the screw-connected DB9 male connector is marked as "GND" on the physical object, this "GND" is not the signal GND)
2. If necessary, the control system can be connected to the PG card DB15 female port via a shielded cable with differential pulse reference to the PG card PA+/PA-, PB+/PB-, GND (6 or 15), as shown in Figure 3. The differential pulse frequency division output is connected to AO+/AO-, BO+/BO-, ZO+/ZO-, GND (6 or 15), as shown in Figure 4.

Be sure to connect the shielding wire of the control system to the PE port of DB15 (the PE port of the screw-connected DB15 female head is marked as "GND" in kind, this "GND" is not the signal GND, but the metal shell of Db9).

Db9 Port		
Pin number	Pin name	Description
1	A+	5V differential encoder input signal
2	B+	
3	Z+	
4	GND (0V)	
5	VCC (+5V)	
6	A-	Frequency > 1 Mhz
7	B-	
8	Z-	
9	GND (0V)	

Figure 1 +TTL33 DB9/DB15 port

Db15 Port		
Pin number	Pin name	Description
1	AO+	5V differential encoder frequency division output (See group 61 parameters)
2	AO-	
3	BO+	
4	BO-	
5	ZO+	
10	ZO-	
7	NC	/
8	NC	
9	NC	
11	PA+	5V Differential signal given input
12	PA-	
13	PB+	
14	PB-	
6	GND	Ground (0V)
15	GND	Ground (0V)

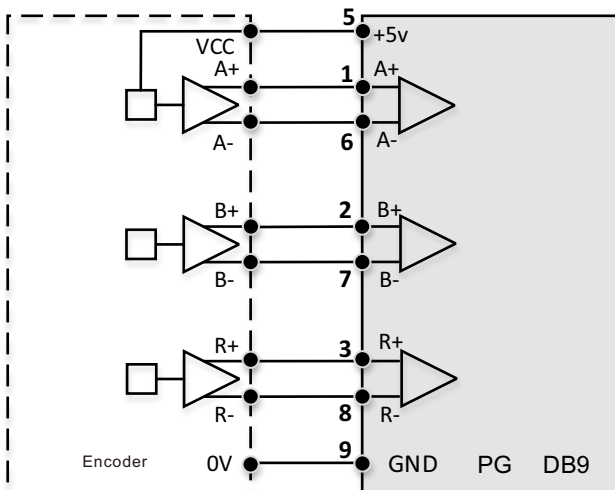


Figure 2 Differential encoder wiring schematic diagram

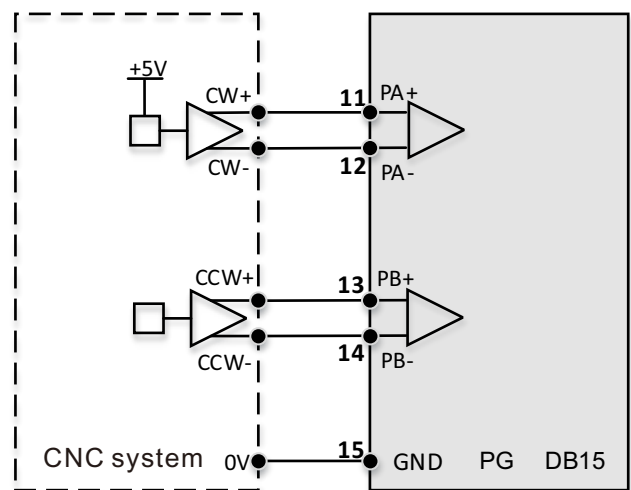


Figure 3 Schematic diagram of differential pulse given wiring

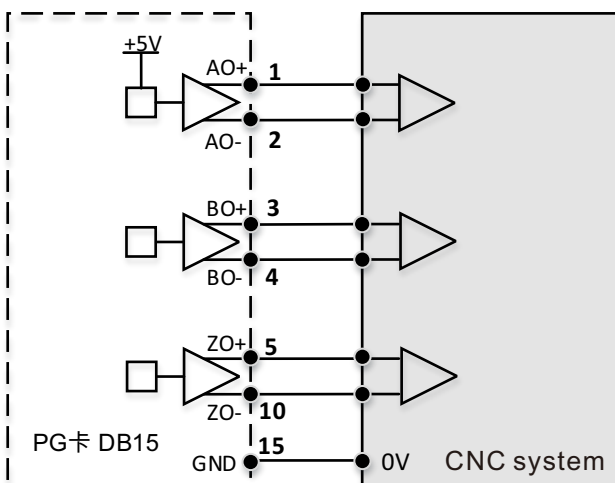


Figure 4 Differential pulse frequency division output wiring schematic diagram