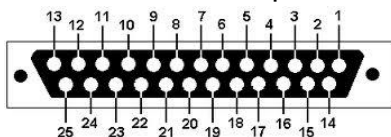




DBK4B Wiring Diagram

Universal Fiber Laser Control Interface

[Refer to user's manual for pin definition]



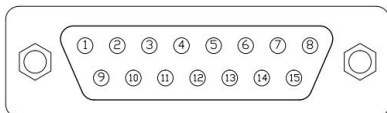
CO2/UV Laser Connection:

PWM-20; GND-10 OR 14 ; GATE-18

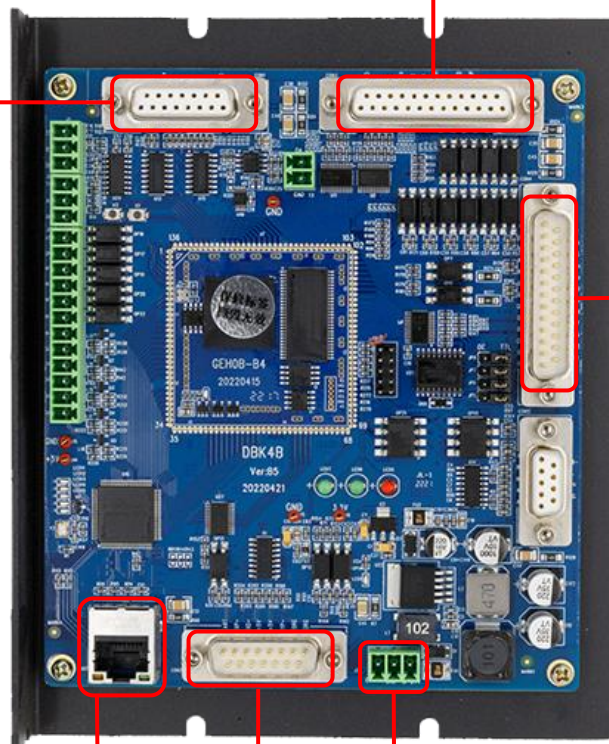
Standard Digital Galvanometer Interface (DB15)

Galvanometer supporting XY2-100 digital transmission protocol.

Power Extension Axis Interface

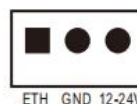


PIN	SIGNAL	DESCRIPTION
1	START	Not used yet. The universal input signal forms a loop with the GND (pin 11) of the control card. When using this signal, just connect the signal and ground to both ends of the switch. This signal is an input signal.
2/9	XP-/XP+	Pulse signal of extended axis X. This signal is an output signal.
3/10	XD-/XD+	The direction signal of the extended axis X. This signal is an output signal.
4/5	+5V	Positive polarity terminal of 5V input power supply. This signal is an input signal.
6/13	YP-/YP+	Pulse signal of extended axis Y. This signal is an output signal.
7	YORG	The zero position signal of the extended axis Y. Form a loop with the GND (pin 11) of the control card. When using this signal, just connect the signal and ground to both ends of the switch. This signal is an input signal.
8	XORG	Extend the zero position signal of axis X. Form a loop with the GND (pin 11) of the control card. When using this signal, just connect the signal and ground to both ends of the switch. This signal is an input signal.
11/12	GND	The negative polarity end of the 5V input power supply is the GND signal of the control card. This signal is an input signal.
14/15	YD-/YD+	Extended axis Y direction signal. This signal is an output signal.



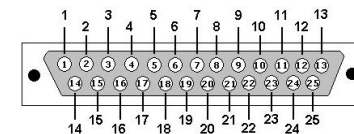
Ethernet Interface

Power Interface



12V~24V DC power supply, supports 12~24V wide voltage input. The right side is the positive pole of the 12~24V power supply, the middle is GND, and the left side is ETH.

IO Interface



PIN	SIGNAL	DESCRIPTION
1,14, 2,15	Out0~ Out3	General output signals 0, 1, 2, 3. TTL compatible. Form a loop with GND signal. It can be set to TTL output or open collector (OC) output through jumpers JP5, JP6, JP7, and JP8.
4,16, 5,17	Out4~ Out7	Universal output signals 4, 5, 6, 7. TTL compatible. Form a loop with GND signal.
3	COM	When the output signal uses OC output, connect this pin to the positive terminal of the OC power supply (maximum 24V) to prevent inductive loads (such as inductive relays) from destroying the output circuit.
6,8, 19,20	GND	The negative polarity end of the input power and output signal is the GND signal of the control card.
7	DA1	Analog output signal. It can control the output of 0~10V analog voltage for power adjustment of some lasers. (Not supported by the first version)
9/21	IN7-/ IN7+	General input signal IN7. Differential input, internally connected to a 1k Ω current limiting resistor. For usage methods, please refer to Section 3.2.2 Usage of General Differential Input Signals.
10/22	IN6-/ IN6+	Universal input signal IN6. Internally connected to a 1k Ω current limiting resistor, differential input. For usage methods, please refer to Section 3.2.2 Usage of General Differential Input Signals.
13,25, 11,23	IN0, IN1, IN4, IN5	Universal single-ended input signals IN0 ~ IN5. It forms a loop with the GND signal. For usage methods, please refer to the use of general single-ended input signals in Section 3.2.1 below. This signal is an input signal. Among them, the IN4 and IN5 standard cards are used as the limit signals of expansion axis 1.
12	IN2	Universal single-ended input signal IN2, used as the limit signal of expansion axis 2 when the standard card is used. It forms a loop with the GND signal. For usage methods, please refer to the use of general single-ended input signals in Section 3.2.1 below. This signal is an input signal.
24	IN3	Universal single-ended input signal IN3, used as the limit signal of expansion axis 2 when the standard card is used. It forms a loop with the GND signal. For usage methods, please refer to the use of general single-ended input signals in Section 3.2.1 below. This signal is an input signal.
18	LaserErr	Laser fault output indicates that the laser is in a fault state. OC output. When the laser fails, this signal is pulled down to GND.