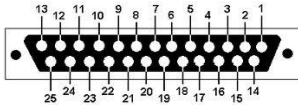




DBK21B Wiring Diagram

Universal Fiber Laser Control Interface



PIN	SIGNAL	DESCRIPTION
1-8	P0~P7	Laser power. TTL output. (pin 2 can be multiplexed into a serial data input, and pin 3 can be multiplexed into a serial clock input.)
9	PLATCH	Laser Power latch signal. TTL output.
10,14	GND	The reference ground of the control board
16,21,11,12	SGIN0~3	Laser status signal of laser module
17	VCC	5V power output.
18	MO	Main oscillator signal. TTL output.
19	AP	Power amplifier signal. TTL output.
20	PRR	Pulse repetitive rate signal. TTL output.
22	Red Light/Pulse Width Modulation	Red light pointer signal of laser can be multiplexed into pulse width modulation ENABLE, TTL output.
23	EMSTOP	Emergency stop signal. TTL output.
13,24,25	NULL	Unconnected

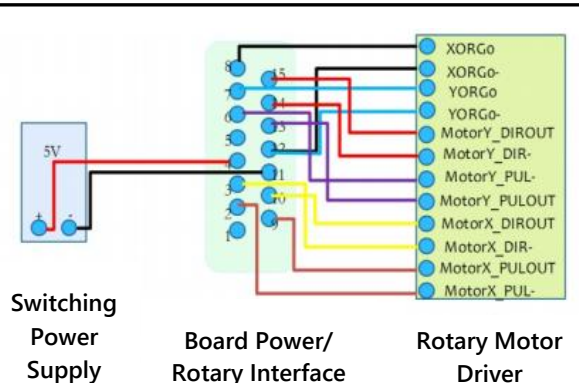
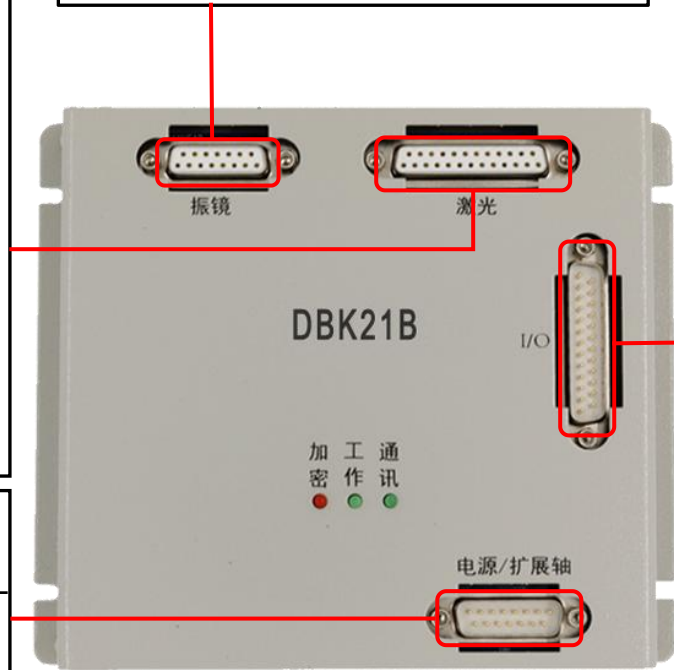
Power/Extension Axis Interface



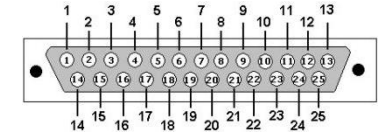
PIN	SIGNAL	DESCRIPTION
1	Null	Reserved and unused.
2, 9	MotorX_PUL-/MotorX_PULOUT	The impulse signal of motor X. See note c for the relevant introduction in detail in the following.
3,10	MotorX_DIR-/MotorX_DIROUT	The direction signal of motor X. See note a for the relevant introduction in detail in the following .
6,13	MotorY_PUL-/MotorY_PULOUT	The impulse signal of motor Y. See note d for the relevant introduction in detail in the following.
7	YORG0	The original signal of motor Y. Input signal and form it with GND of control board to represent this pin. Connect the signal with GND to both ends of the switch respectively.
8	XORG0	The original signal of motor X. Input signal and form it with GND of control board to represent this pin. Connect the signal with GND to both ends of the switch respectively.
14,15	MotorY_DIR-/MotorY_DIROUT	The direction signal of motor Y. See note b for the relevant introduction in detail in the following .
4,5	+5V	Anode of 5V input power
11,12	GND	Cathode of 5V input power (ground signal), that is the ground signal of control board.

Standard Digital Galvanometer Interface (DB15)

Galvanometer supporting XY2-100 digital transmission protocol



IO Interface



PIN	SIGNAL	DESCRIPTION
1,14,2,15	Out1~Out3	Universal output signals 0, 1, 2, 3. TTL compatible. Form a loop with the 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 0, 1, 2, 3. TTL compatible. Form a loop with the 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	DA	Analog output signal. Controllable output 0~10V analog voltage, used for power adjustment of some lasers (not supported by the first version)
9,21	IN7-/IN7+	Universal input signal IN7. Differential input, internally connected to a 1k Ω current limiting resistor.
10,22	IN6-/IN6+	Universal input signal IN6. Internally connected to a 1k Ω current limiting resistor, differential input.
13,25,11,23	IN0,IN1,IN4,IN5	Universal single-ended input signals IN0 ~ IN5. It forms a loop with the GND signal, and this signal is the 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, and this signal is the 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, and this signal is the input signal.
18	LaserErr	Laser fault output indicates that the laser is in a fault state. OC output. In the event of a laser failure, this signal is pulled down to GND.

Example: Foot switch connection method, connect pin 13 and pin 6, select 0 for the start marking port of the software interface.
Example: Marking completion output connection is connected to pin 1 and pin 8, and the marking completion port of the software interface selects 0.