

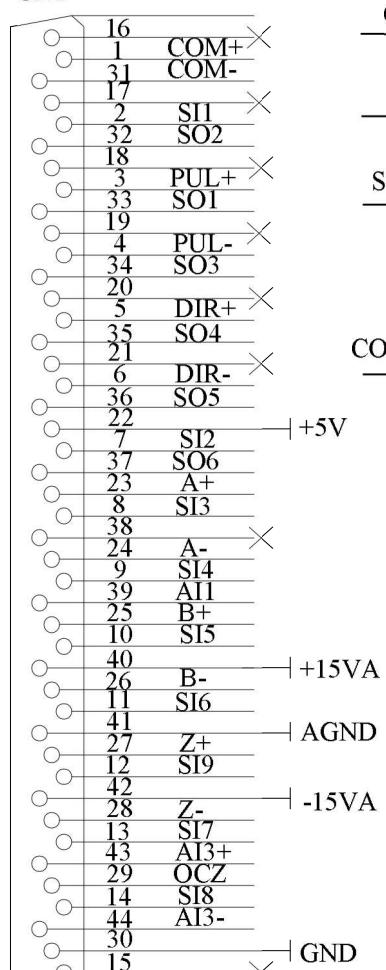


## 3.2 Driver Terminals Function

### 3.2.1 Control Signal Port-CN1 Terminal

The left in Figure 3.3 servo drive control signal port CN1 DB44 connectors, drive side socket connection plug for the hole type, with the controller side needle; Figure 3.3 right side of the top to bottom of the SI input of the switch, the switch SO outputs, analog A1 input, the A3 input.

CN1 Shell grounding



CN1 control interface

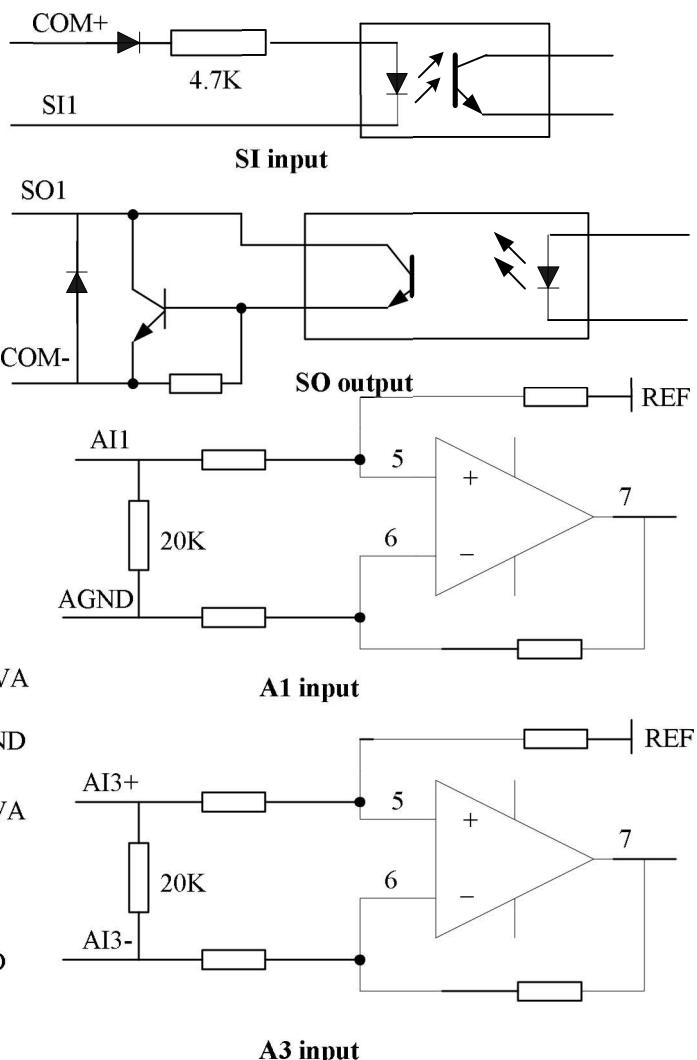


Figure 3-3 Servo Driver Port Terminal Layout

Figure3.1 Control Signal Port-CN1 Signal Explain

Subscript	Signal	Input/output	Name and Explain
1	COM+	input	Public power supply positive terminal of the external input control signal, 12V ~ 24V
2	SI1	input	Digital input signal 1, default active low maximum



			input 24V
3	PUL+	input	Enter the positive and negative terminals, respectively, for pulse TTL level (5V), the rising edge of default Effect
4	PUL-	input	
5	DIR+	input	
6	DIR-	input	Respectively, the direction of the input to the positive terminal and a negative terminal, TTL level (5V), default optocoupler deadline As a positive direction
7	SI2	input	Digital input signal 2,default low level is effect Maximum input 24V
8	SI3	input	Digital input signal 3,default low level is effect Maximum input 24V
9	SI4	input	Digital input signal 4,default low level is effect Maximum input 24V
10	SI5	input	Digital input signal 5,default low level is effect Maximum input 24V
11	SI6	input	Digital input signal 6,default low level is effect Maximum input 24V
12	SI9	input	Digital input signal 9,default low level is effect Maximum input 24V
13	SI7	input	Digital input signal 7,default low level is effect Maximum input 24V
14	SI8	input	Digital input signal 8,default low level is effect Maximum input 24V
22	+5V	output	Reserve, encoder signal output +5V
23	A+	output	Motor encoder A phase positive, negative different output terminal
24	A-	output	
25	B+	output	Motor encoder B phase positive, negative different output terminal
26	B-	output	
27	Z+	output	Motor encoder Z phase positive, negative different output terminal
28	Z-	output	
29	OCZ	output	Z signal OC output
30	GND5V	output	Encoder signal output power ground
31	COM-	output	Digital output signal commonality ground
32	SO2	output	Digital output signal 2
33	SO1	output	Digital output signal 1
34	SO3	output	Digital output signal 3



35	SO4	output	Digital output signal 4
36	SO5	output	Digital output signal 5
37	SO6	output	Digital output signal 6
39	AI1	input	Analog input 1,input voltage range -10-10V,input resistor 20KΩ
40	+15VA	output	Reserve output inner 15V,less than 50mA
41	GND15VA	output	Reserve,+15V ground
43	AI3+	input	Analog input 3 positive, negative, input voltage range -10-10V,input resistor 20KΩ
44	AI3-	input	
15-21,38, 42	NC	/	Not connect
Shell	FG	/	Shield ground

### 3.2.2 Encoder Input Port-CN2 Terminal

Figure 3.2 Encoder Input Port-CN2 Terminal Signal Explain

Pin	Signal	Name	Terminal Arrange Figure
1	EA+	Encoder channel A+ input	
2	EB+	Encoder channel B+ input	
3	EGND	Signal ground	
4	Hall W+	Hall sensor W+ input	
5	Hall U+	Hall sensor U+ input	
6	FG	Ground terminal for shielded	
7	EZ+	Encoder channel Z+ input	
8	EZ-	Encoder channel Z- input	
9	Hall V+	Hall sensor V+ input	
10	Hall V-	Hall sensor V- input	
11	EA-	Encoder channel A- input	
12	EB-	Encoder channel B- input	
13	VCC	+5V @ 100 mA max.	
14	Hall W-	Hall sensor W- input	
15	Hall U-	Hall sensor U- input	

### 3.2.3 Communication Port

Figure 3.3 Connect STU Port-CN4 Signal Explain

RS232	May via dedicated series cable connect PC or STU, prohibit insertion power on, and suggest use twisted-pair or shielded wire. the wire long is less than 2 meter
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RS485	Suggest adopt shield twisted-pair.		
Terminal	signal	name	
1	GND	Power ground	
2	TxD	RS232 send terminal	
3	5V	Reserve, provide current less than 50mA	
4	RxD	RS232 receive terminal	
5	RS485 +	Reserve,RS485+/A	
6	RS485 -	Reserve,RS485-/B	

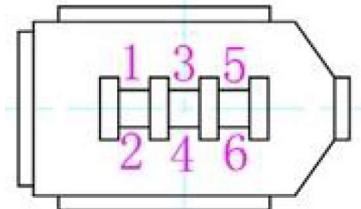
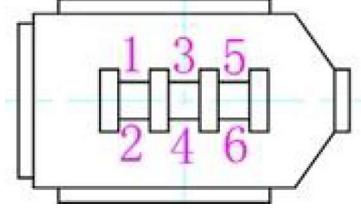


Figure 3.4 Driver interconnect interface-CN3 signal explain

RS485			
Terminal	signal	name	
1	GND	Power ground	
2	NC	Not connect	
3	5V	Reserve, provide current less than 50mA	
4	NC	Not connect	
5	RS485 +	Reserve,RS485+/A	
6	RS485 -	Reserve,RS485-/B	



### 3.2.4 Power Port

Figure 3.5 Main Power Input Port-CN5

Terminal	Signal	Name	
1	R	Drive the main power input: connecting 3-phase 220Vac (line voltage);	
2	S	orders phase 220Vac, the hot and neutral should be connected to the R and T both ends.	
3	T		
4	BR	Outside brake resistor input terminal	Outside brake resistor
5	P+	DC busbar voltage+	connect between BR and P+

Figure 3.6 Control Power Input Port-CN6

Terminal	Signal	Name
1	U	3 phase motor power input
2	V	
3	W	
4	PE	Frame ground



5	r	Control power input 1	Control power voltage range between 1 and 2:85Vac-265Vac
	t	Control power input 2	

### 3.3 I/O Interface Principle

#### 3.3.1 Switch Value Input Interface

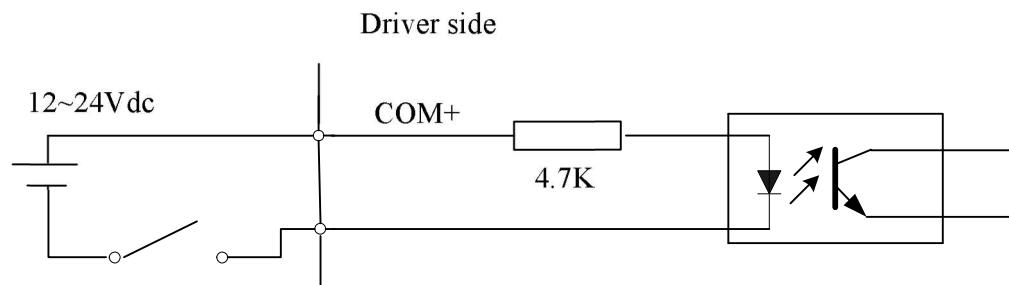


Figure 3-4 Switch Value Input Interface

- (1)The user provide power, DC 12-24V, current $\geq$ 100mA
- (2)Notice, if current polar connect reverse, will make servo driver can't run.

#### 3.3.2 Switch Value Output Interface

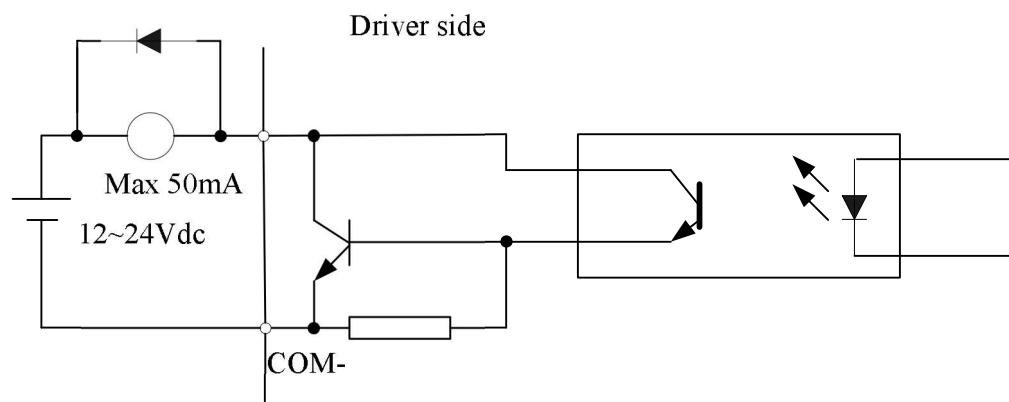


Figure 3.5 Switch Value Output Interface

- (1) The external power supply is provided by the user, but care must be taken, if the power supply polarity reversal, the servo drive is damaged.
- (2) The output of the form of open-collector maximum voltage of 25V, maximum current of 50mA, external power supply. Therefore, the load switch output signal must meet the limited