

CKTD- 750 S 200 User Manual



DR DRIVE CO., LTD.

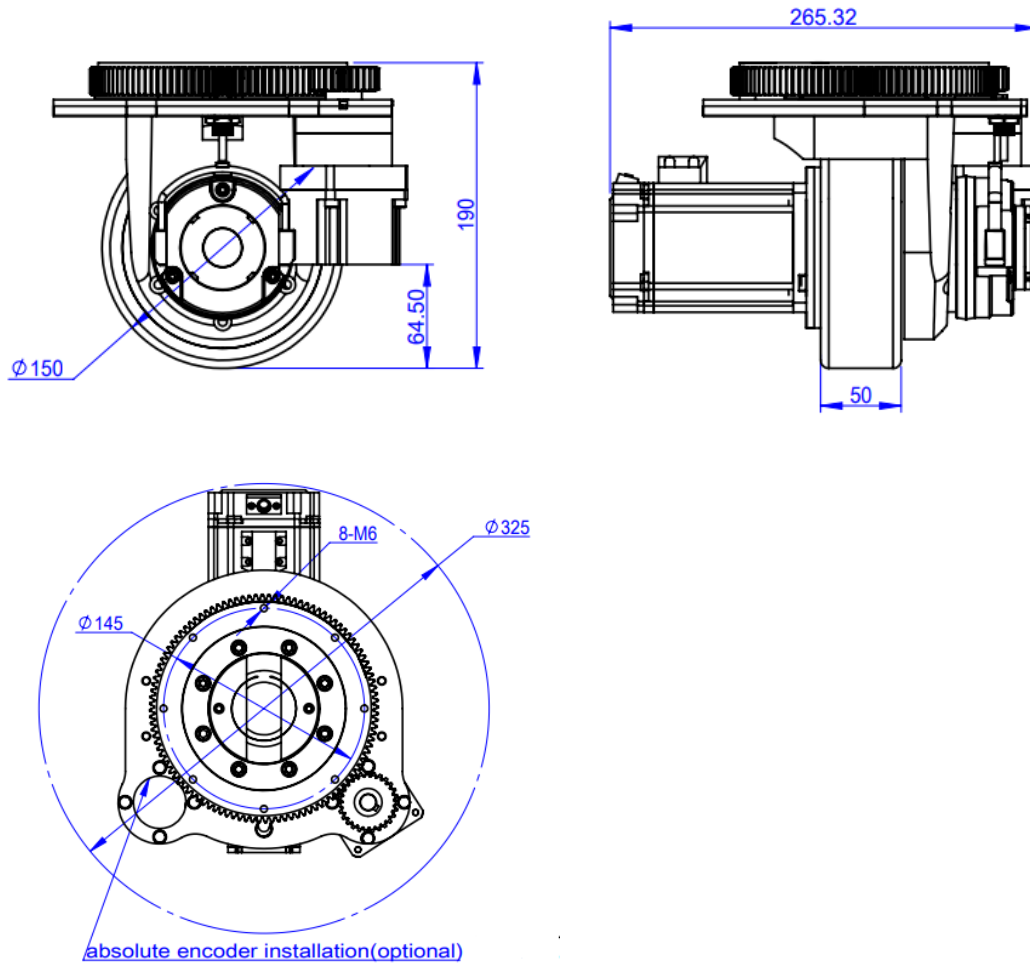
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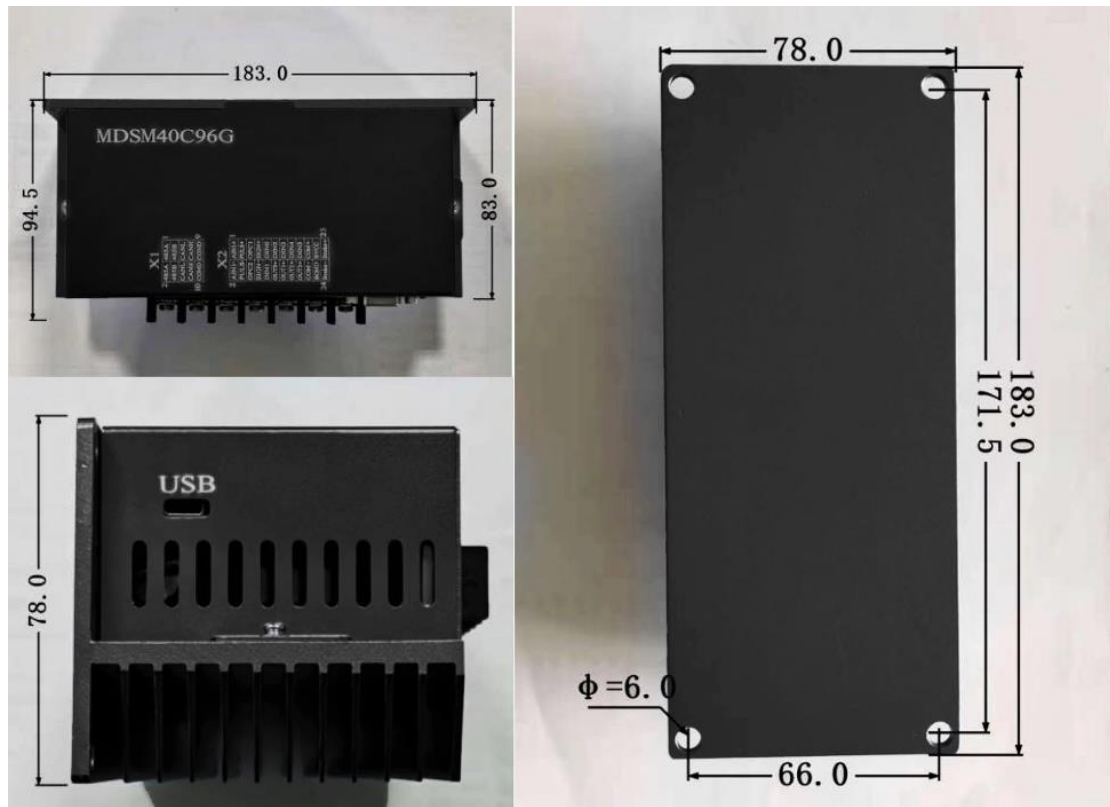
1. Dimensions and Parameters

1.1 Dimension parameters

CKTD- 750 S 200 Appearance and Dimensions



MDSM40C96G Appearance and Dimensions



MDSM15B60G Appearance and Dimensions

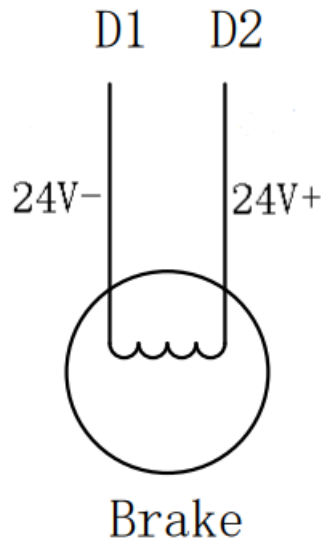


1.2 Motor parameters

Travel Motor Parameters Driver Parameters		
1	Motor Type	Servo
2	Rated Power (s 2-60min) Power (W)	750
3	Rated Voltage (V)	24
4	Rated Speed (rpm)	3000
5	Rated Current (A)	38
6	Gear Ratio	26.5
7	Encode(ppr)	2500
8	Wheel diameter (mm)	150
9	Rated torque (Nm)	2.39
Steering motor steering parameters		
10	Motor Type	Servo
11	Rated Power (s 2-60min) Power (W)	200
12	Rated Voltage (V)	24
13	Rated Speed (rpm)	3000
14	Rated Current (A)	12
15	Gearbox reduction ratio	35
16	Master-slave gear ratio	4
17	Encode(ppr)	2500
18	Rated torque (Nm)	0.64
19	Maximum steering angle(°)	±130

2. Electrical Component Description

2.1 Travel motor and driver



Electrical schematic of the brake

Travel motor interface information

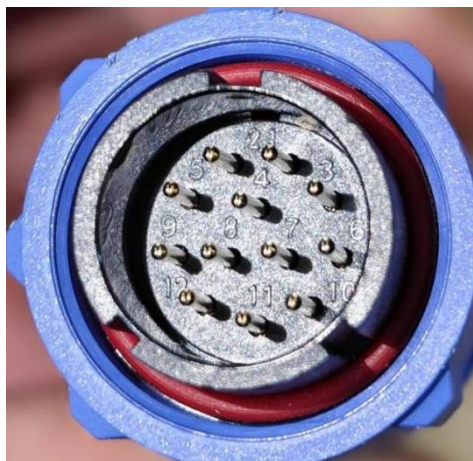
Power Line Sequence		
Pin	Color	Function
1	GRE	PE
2	RED	U
3	BLU	V
4	YEL	W
Encoder Wire Sequence		
Pin	Color	Function
1	Green	A
2	Green-Black	A-
3	BLU	B
4	BLU-Black	B-
5	Yellow	Z
6	Yellow-Black	Z-

7	Brown-Black	U
8	White-Black	V
9	Gray-Black	W
10	Black	GND
11	Red	+5V
12	Shield	FG

Travel motor power line connector:



Travel motor encoder connector:



Travel driver interface information



MDSM40C96G X1 communication interface definition

NO.	Name	Definition	Harness Selection	Terminal Model	Crimping Tool
1	485A	485 Bus (without 120Ω resister)	It is recommended to use a twisted pair connection with shielding, Cross-sectional area of copper core wire:0.5 mm ²	E0506 tube type pre-insulated terminal	HSC8 6-4 Euro type terminal special crimping pliers
2	485A				
3	485B				
4	485B				
5	CANL	CAN Bus (without 120Ω resister) An external termination resistor must be added			
6	CANL				
7	CANH				
8	CANH				
9	CGND	CAN bus and 485 bus ground, it is recommended to connect to ground			
10	CGND				
Notes		Maximum terminal torque: 0.2N·m			

MDSM40C96G X2 communication interface definition

Pin Number	Signal Name	Signal Definition	Wiring Harness Selection	Terminal Model	Crimping Tool
1	AIN0+	The analog input impedance is 10K, input voltage range: -10V to 10V	It is recommended to use a wiring harness with a tin-plated copper braided mesh, copper core wire cross-sectional area 0.5 mm ²	E0506 Tube Type Pre-insulated Terminal	HSC8 6-4 European Terminal Dedicated Crimping Pliers
2	AIN0-				
3	PULS+	Pulse signal, operating voltage is 5V. If a higher voltage is needed, an external series resistor is required			
4	PULS-				
5	OPC1	For pulse signal input, compatible with 12V			
6	OPC2	For pulse signal input, compatible with 12V			
7	SIGN+	Direction signal, operating voltage is 5V. If a higher voltage is needed, an external series resistor is required			
8	SIGN-				
9	DIN0	Digital input channels 0, 1, 2, compatible voltage 12V to 24V.			
10	DIN1				
11	DIN2				
12	OUT0+	Digital output channel 0, output type: Collector Open Circuit, withstand voltage 30V/300mA			
13	DIN3	Digital input channel 3, compatible voltage 12V to 24V.			
14	OUT1+	Digital output channel 1, output type: Collector Open Circuit, withstand voltage 30V/300mA			
15	DIN4	Digital input channel 4, compatible voltage 12V to 24V.			

Pin Number	Signal Name	Signal Definition	Wiring Harness Selection	Terminal Model	Crimping Tool
16	OUT2+	Digital output channel 2, output type: Collector Open Circuit, withstand voltage 30V/300mA			
17	DIN5	Digital input channel 5, compatible voltage 12V to 24V.			
18	OUT3+	Digital output channel 3, output type: Collector Open Circuit, withstand voltage 30V/300mA			
19	COM+	Digital input is a common anode port, for optocoupler input common positive			
20	COM-	Digital output is a common ground port, for optocoupler output common ground			
21	BVCC	Positive terminal of the brake supply with a maximum withstand voltage of 60V.			
22	BGND	Brake power supply			
23	Brake+	Connect 2 wires for the brake			
24	Brake-				
Precautions		Maximum torque for terminals: 0.2N ·m			

MDSM40C96G X3 Feedback Definition

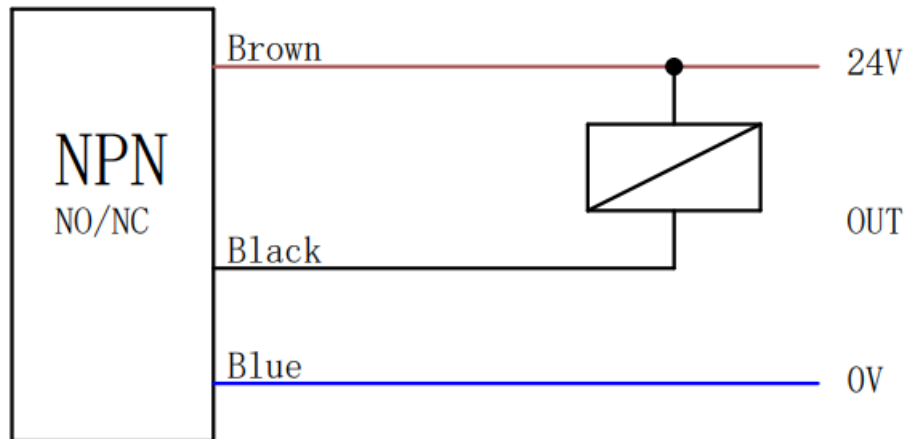
Feedback is defined by the G series feedback terminal X3 interface and wiring harness selection				
Pin Number	Signal	Pin Number	Signal	Wiring Harness Selection
1	B+	9	V-	It is recommended to use a wiring harness with a tin-plated copper braided mesh,
2	A+	10	U-	
3	W+	11	Z+	
4	V+	12	Z-	

5	U+	13	+5V	with a copper core wire cross-sectional area of 0.15 mm ²
6	B-	14	GND	
7	A-	15	PE	
8	W-			
If it is Hall Feedback, connect U+, V+, W+, +5V, GND. For single-ended TTL feedback, connect signal A+, B+, Z+, U+, V+, W+, +5V, GND. When soldering, the pin numbers must correspond one-to-one with the pin numbers marked on the matching male connector.				

MDSM40C96G X4 Power Interface Definition

Serial Number	Name	Definition	High-temperature wear-resistant multi-strand copper core cross-sectional area
1	+	Input Power Positive	6~10mm ²
2	-	Input Power Negative	6~10mm ²
3	RB	Braking Resistor (the other end of the braking resistor connects to +)	6mm ²
4	PE	Shell Shield Ground	6mm ²
5	U	Motor U Phase	6~10mm ²
6	V	Motor V Phase	6~10mm ²
7	W	Motor W Phase	6~10mm ²
Precautions	① Maximum Torque at Terminal: 1.2N ·m ② Recommended to use a dedicated crimping tool for pre-insulated terminals		

2.2 Steering motor and driver



NPN Proximity Switch Electrical Schematic

Steering Motor Interface Information

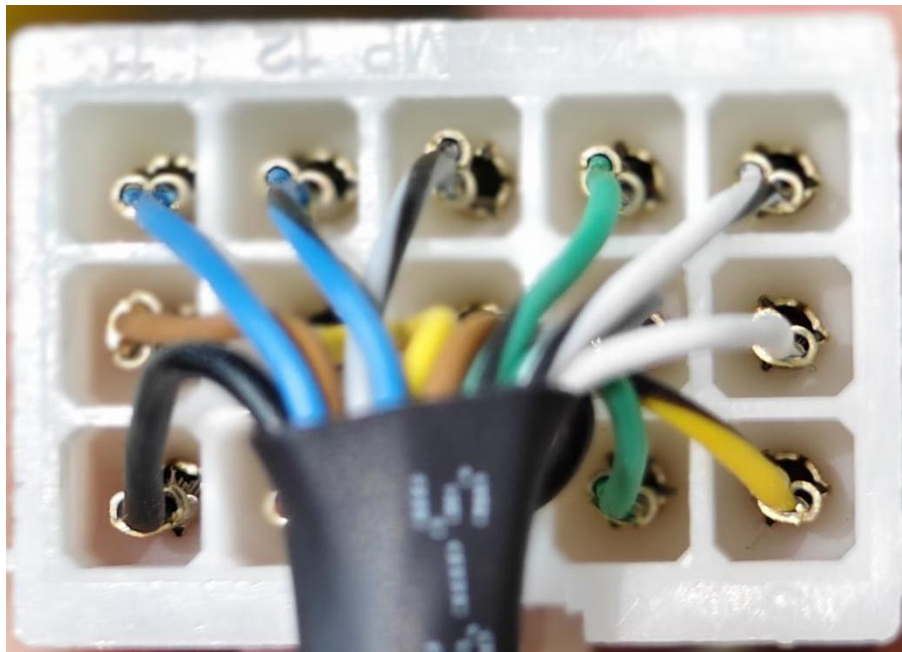
Power Line Sequence		
Pin	Color	Function
1	RED	U
2	BLU	V
3	YEL	W
4	YEL-GRE	GND
Encoder Wire Sequence		
Pin	Color	Function
1	Shield	FG
2	Red	5V
3	Black	0V
4	Green	A
5	Yellow-Black	Z-
6	Brown	U
7	Yellow	Z

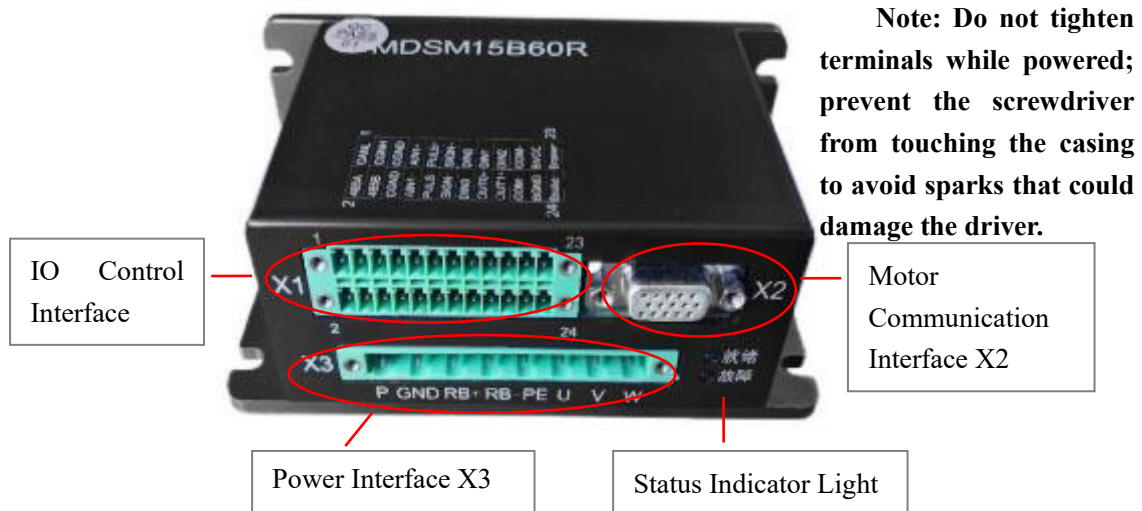
8	Brown-Black	U-
9	Gray	B
10	White	V
11	Blue	W
12	Blue-Black	W-
13	Gray-Black	B-
14	Green-Black	A-
15	White-Black	V-

Power Connector:



Encoder Connector:





MDSM15B60G X1 Interface Definition

IO control interface X1 definition and wire diameter, terminal, crimp tool selection							
Pin Number	Signal Name	Signal Definition	Wiring harness Selection	Terminal Model	Crimping Tool		
1	CANL	CAN bus (without 120 Ω resistor), must add termination resistor	Shielded twisted pair connections are recommended	E0506 Tube Type Pre-insulated Terminal	HSC8 6-4 European Terminal Dedicated Crimping Pliers		
2	485A	485 bus (without 120Ω resistor)					
3	CANH	CAN bus (without 120 Ω resistor), must add termination resistor					
4	485B	485 bus (without 120Ω resistor)					
5	CGND	CAN bus and 485 bus ground, recommended to connect to ground					
6	CGND	CAN bus and 485 bus ground, recommended to connect to ground					
7	AIN0+	Analog input impedance of 10K.					
8	AIN0-	Input voltage range: -10V to 10V.					
9	PULS+	Pulse signal, operating voltage is 5V.					
10	PULS-	If a higher voltage is needed, an external series resistor is required					

11	SIGN+	Direction signal, operating voltage is	It is recommended to use a wiring harness with a tin-plated copper braided mesh, copper core wire cross-sectional area 0.5 mm ²		
12	SIGN-	5V. If a higher voltage is needed, an external series resistor is required			
13	DIN0	Digital input channel 0, compatible voltage 12V to 24V.			
14	DIN3	Digital input channel 3, compatible voltage 12V to 24V.			
15	DIN1	Digital input channel 1, compatible voltage 12V to 24V.			
16	OUT0+	Digital output channel 0, output type: Collector Open Circuit, withstand voltage 30V/300mA			
17	DIN2	Digital input channel 2, compatible voltage 12V to 24V.			
18	OUT1+	Digital output channel 1, output type: Collector Open Circuit, withstand voltage 30V/300mA			
19	COM+	Digital input is a common anode port, for optocoupler input common positive			
20	COM-	Digital output is a common ground port, for optocoupler output common ground			
21	BVCC	Positive terminal of the brake supply with a maximum withstand voltage of 60V.			
22	BGND	Brake power supply			
23	Brake+	Connect 2 wires for the brake			
24	Brake-				

MDSM15B60G X2 Motor Feedback Interface Definition

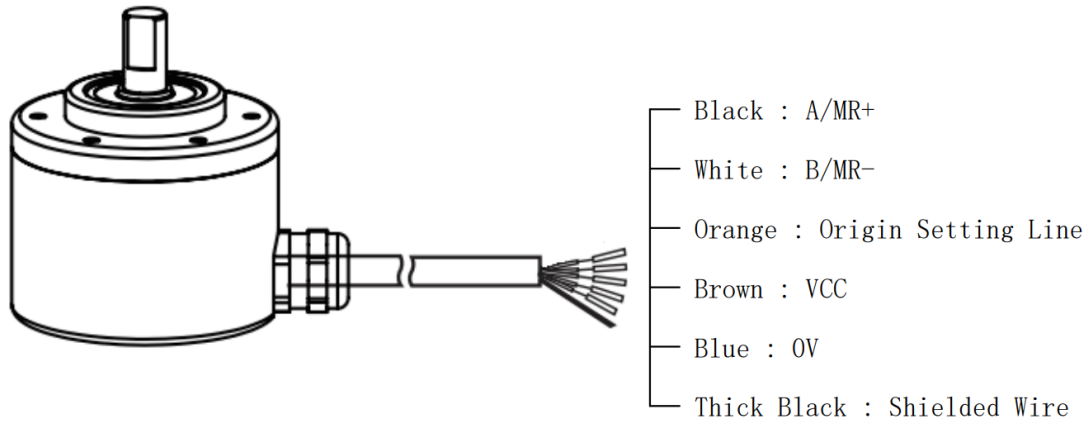
Feedback for G-Series Feedback Terminal X2 Interface Definition and Harness Selection				
Pin Number	Signal	Pin Number	Signal	Wiring Harness Selection
1	B+	9	V-	It is recommended to use a wiring harness with a tin-plated copper braided mesh, with a copper core wire cross-sectional area of 0.15 mm ²
2	A+	10	U-	
3	W+	11	Z+	
4	V+	12	Z-	
5	U+	13	+5V	
6	B-	14	GND	
7	A-	15	PE	
8	W-			
If it is Hall Feedback, connect U+, V+, W+, +5V, GND. For single-ended TTL feedback, connect signal A+, B+, Z+, U+, V+, W+, +5V, GND. When soldering, the pin numbers must correspond one-to-one with the pin numbers marked on the matching male connector.				

MDSM15B60G X3 Power Interface Definition

Serial Number	Name	Definition	High-temperature wear-resistant multi-strand copper core cross-sectional area
1	P	Input Power Positive	$2.5 \sim 4 \text{ mm}^2$
2	GND	Input Power Negative	$2.5 \sim 4 \text{ mm}^2$
3	RB+	Braking Resistor	$1.5 \sim 4 \text{ mm}^2$
4	RB-		$1.5 \sim 4 \text{ mm}^2$
5	PE	Shell Shield Ground	$1.5 \sim 4 \text{ mm}^2$
6	U	Motor U Phase	$2.5 \sim 4 \text{ mm}^2$
7	V	Motor V Phase	$2.5 \sim 4 \text{ mm}^2$
8	W	Motor W Phase	$2.5 \sim 4 \text{ mm}^2$
Precautions		①Maximum torque of terminal: $0.4 \text{ N} \cdot \text{m}$ ②Recommended to use LX-03C pre-insulated crimping pliers.	

2.3 Absolute encoders

Absolute Encoder Pins



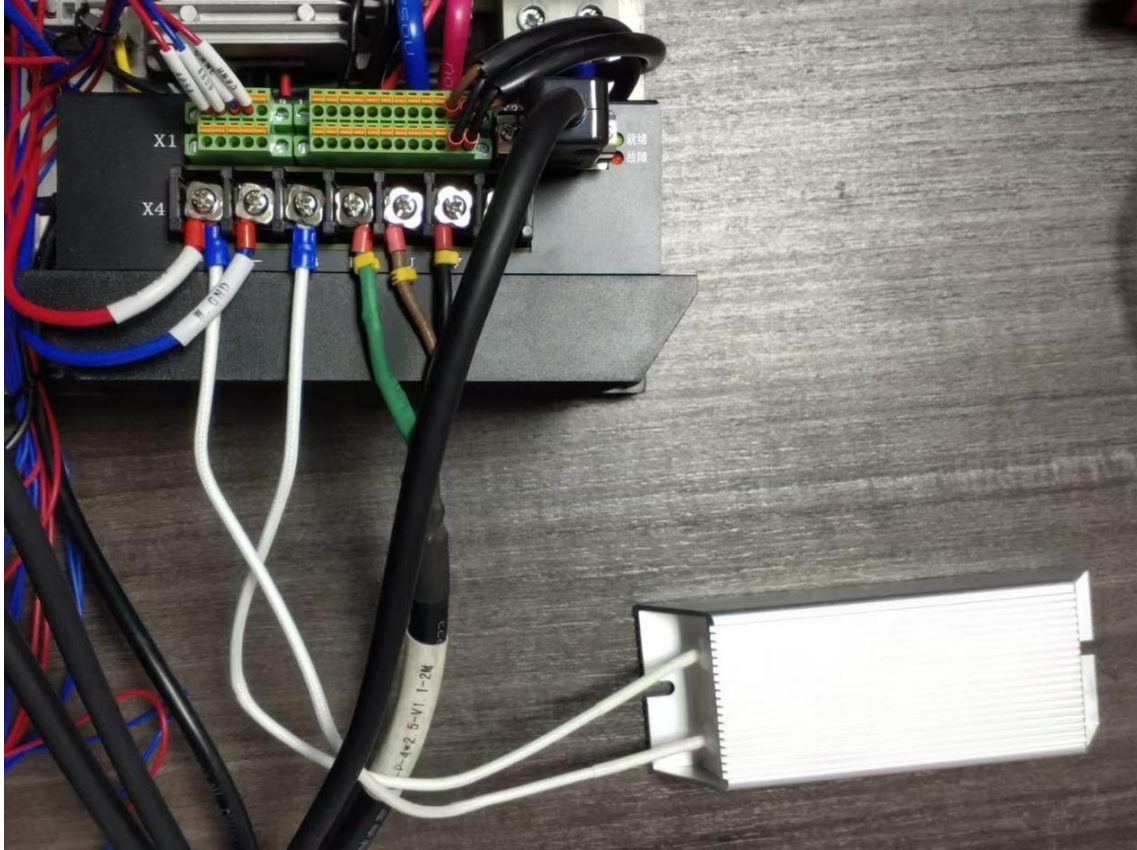
Absolute Encoder Pinout

2.4 Braking resistors

Brake Resistor: A device that helps a motor convert the regenerative electrical energy it generates due to a quick stop into heat in a mechanical system with a quick stop.

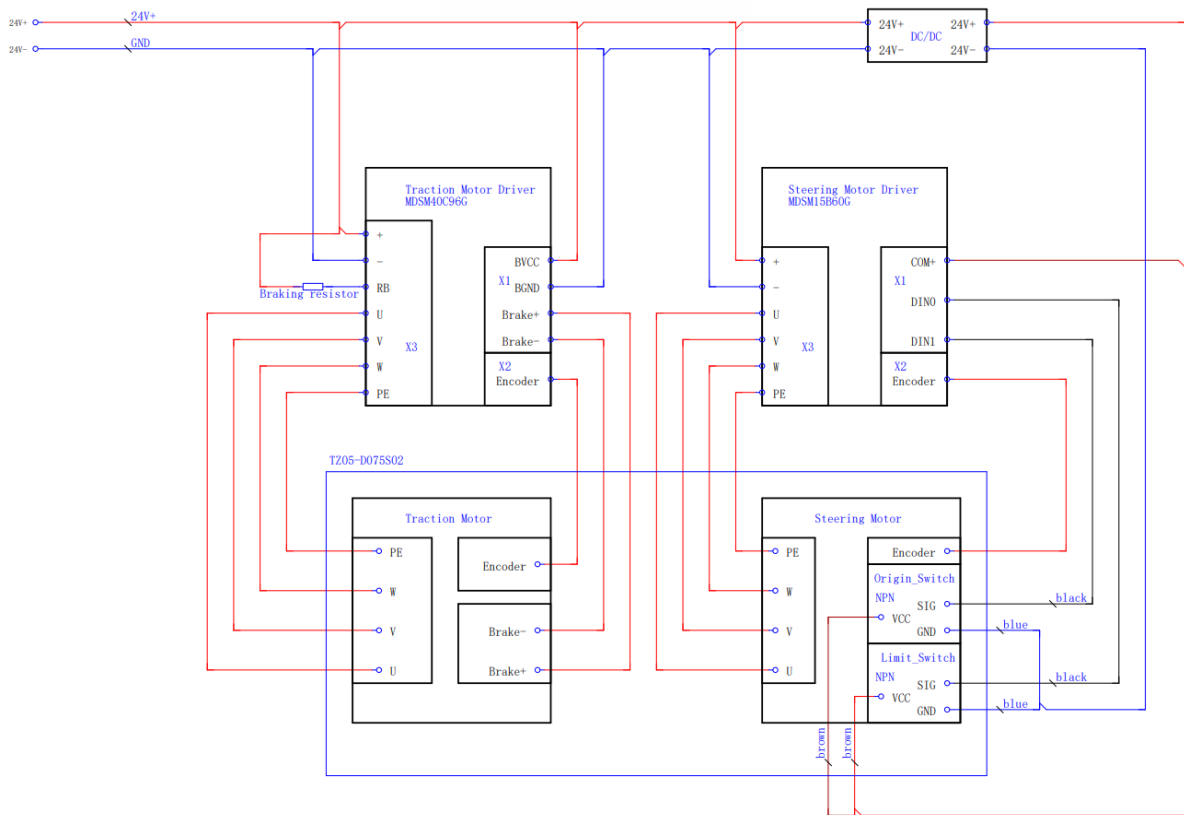
The driver is factory equipped with two $3\Omega/200W$ braking resistors.

One end of the braking resistor is connected to the “+” pin of the driver, and the other end is connected to the “RB” pin of the driver.



NOTE: The factory-equipped braking resistor is used for the travel drive; the steering drive is not equipped with a braking resistor.

2.5 Tiller wheel electrical connection example



3. Testing and Usage

3.1 Traveling motor test

Step 1

Connect the PC and drive with USB(Type-C). Then open the software.

Step 2

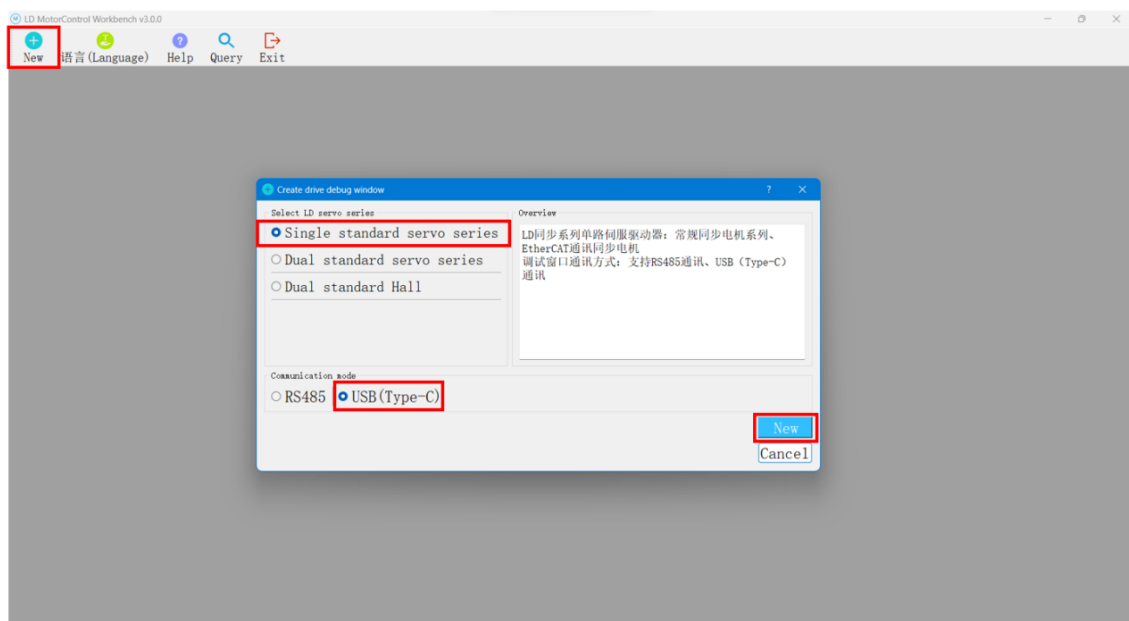
-> New

-> Create drive debug window

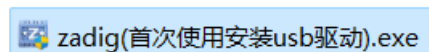
-> Single standard servo series

-> USB(Type-C)

-> New

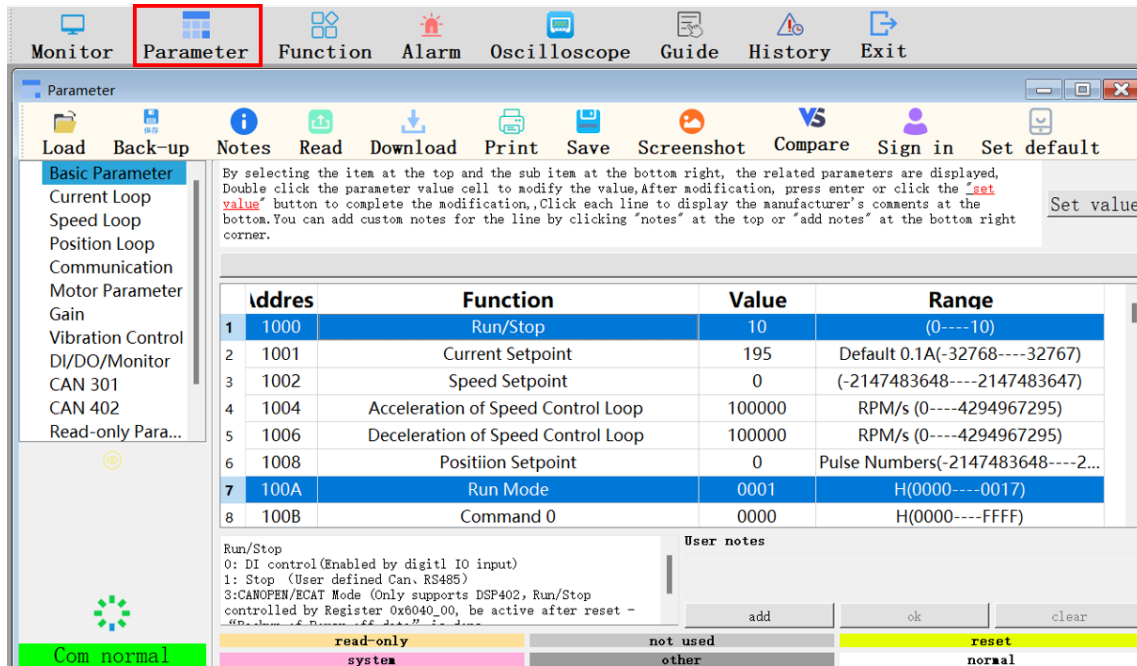


(If cannot connect properly, install the drive in the installation directory of the upper computer software.)



Step 3

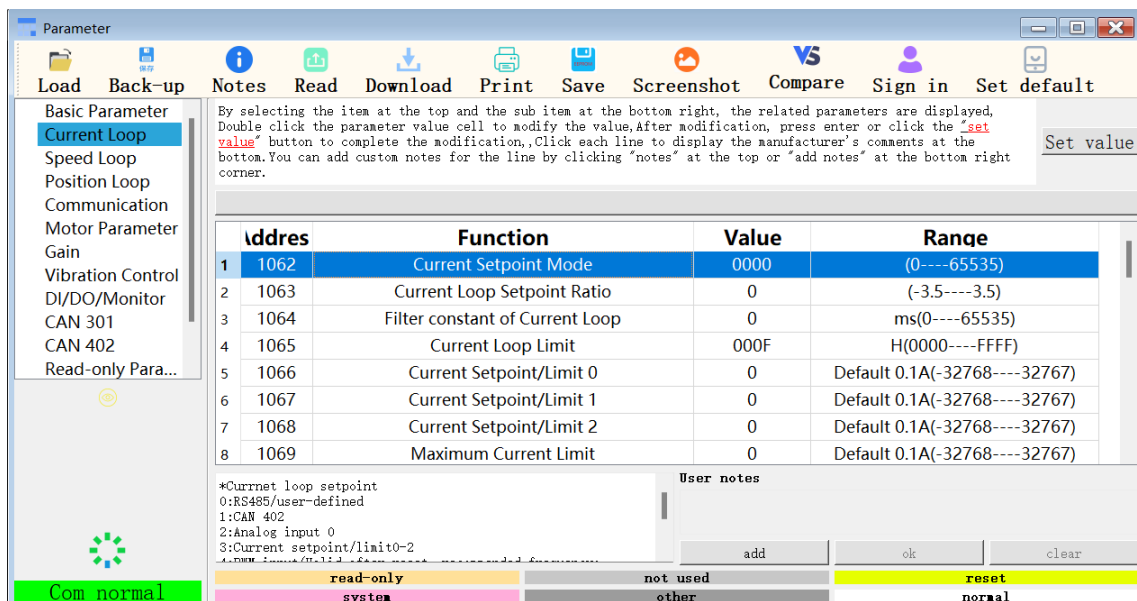
```
-> set    1000    Run/Stop    10
        100A    Run Mode    0001
```



Step 4

-> Current Loop

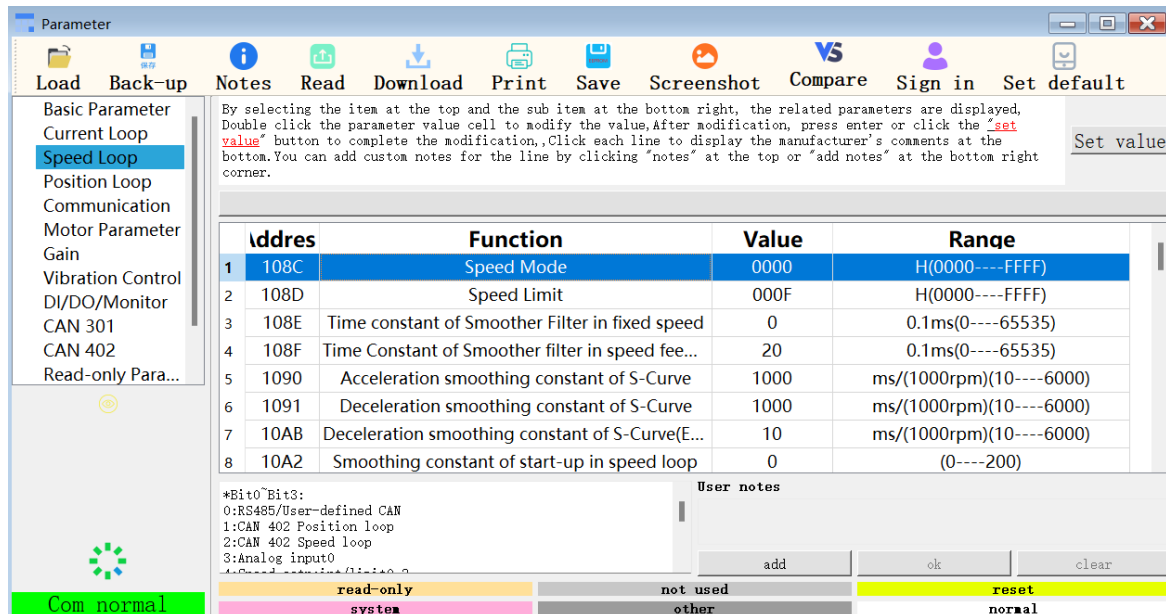
-> set 1062 Current Setpoint Mode 0000



Step 5

-> Speed Loop

-> set 108C Speed Mode 0000



Step 6

-> On enable

-> Setting: input speed(such as:2000) enter



If the motor runs normally , the test is finished.

3.2 Steering motor testing

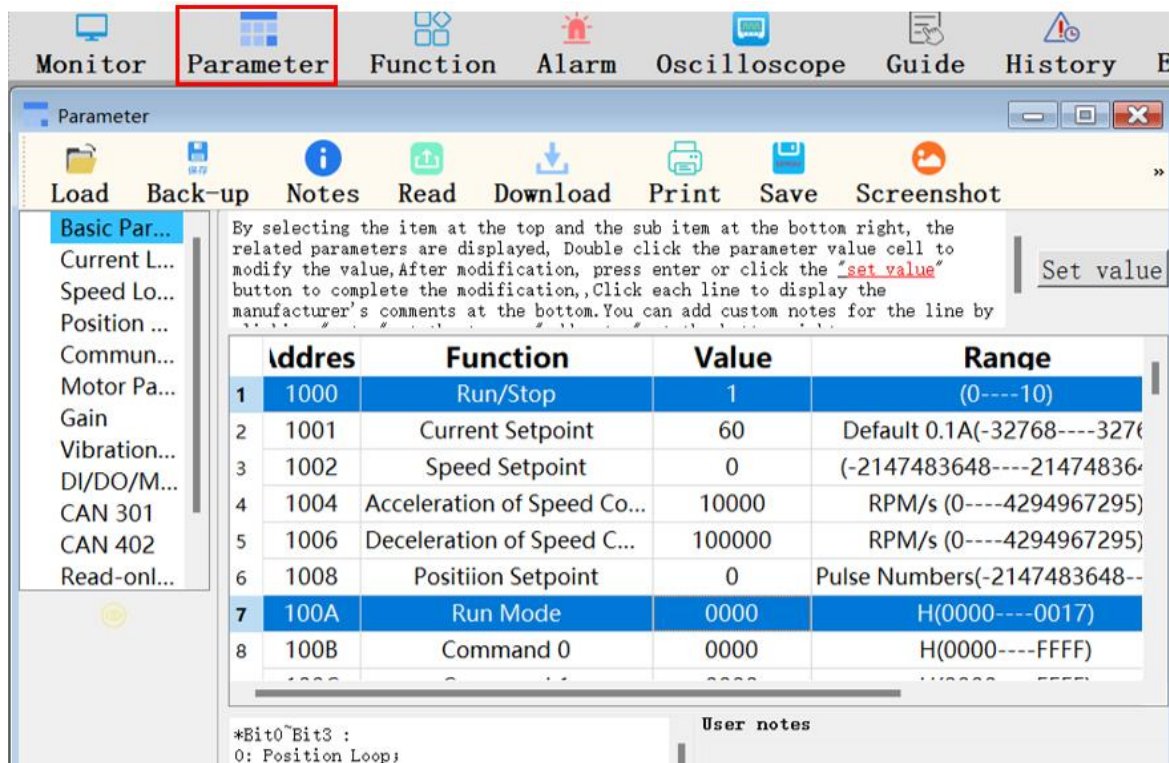
Step 1

-> Parameter

-> Basic Parameter

-> set 1000 Run/Stop 1

100A Run Mode 0000



Step 2

-> Speed Loop

-> set 108C Speed Mode 0000

Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in

Basic Parameter
Current Loop
Speed Loop
Position Loop
Communication
Motor Parameter
Gain
Vibration Control
DI/DO/Monitor
CAN 301
CAN 402
Read-only Parame...
User Defined

By selecting the item at the top and the sub item at the bottom right, the related parameters are display, click the parameter value cell to modify the value, After modification, press enter or click the "set_val" to complete the modification, Click each line to display the manufacturer's comments at the bottom. You can add custom notes for the line by clicking "notes" at the top or "add notes" at the bottom right corner.

	Address	Function	Value	Range
1	108C	Speed Mode	0000	H(0000----FFFF)
2	108D	Speed Limit	000F	H(0000----FFFF)
3	108E	Time constant of Smooth...	0	0.1ms(0----65535)
4	108F	Time Constant of Smoot...	0	0.1ms(0----65535)
5	1090	Acceleration smoothing ...	1000	ms/(1000rpm)(10----6000)
6	1091	Deceleration smoothing ...	1000	ms/(1000rpm)(10----6000)
7	10AB	Deceleration smoothing ...	10	ms/(1000rpm)(10----6000)
8	10A2	Smoothing constant of st...	0	(0----200)
9	1092	Curve type of Motion Co...	2	(0----2)
10	5080	CAN402 Trapezoidal acc...	10000	(0----30000000)
11	5082	CAN402 Trapezoidal dec...	10000	(0----30000000)

*Bit0~Bit3:
0:RS485/User-defined CAN
1:CAN 402 Position loop
2:CAN 402 Speed loop
3:Analog input0
4:Speed feedback (Limit 0-...

User notes

add ok

Step 3

-> Position Loop

-> set 10D0 Position Loop Mode 0

Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in

Basic Parameter
Current Loop
Speed Loop
Position Loop
Communication
Motor Parameter
Gain
Vibration Control
DI/DO/Monitor
CAN 301
CAN 402
Read-only Parame...
User Defined

By selecting the item at the top and the sub item at the bottom right, the related parameters are display, click the parameter value cell to modify the value, After modification, press enter or click the "set_val" to complete the modification, Click each line to display the manufacturer's comments at the bottom. You can add custom notes for the line by clicking "notes" at the top or "add notes" at the bottom right corner.

	Address	Function	Value	Range
1	10D0	Position Loop Mode	0	(0----65535)
2	10D1	Electronic Gear Numerat...	1	(1----65535)
3	10D2	Electronic Gear Numerat...	1	(1----65535)
4	10D3	Electronic Gear Numerat...	1	(1----65535)
5	10D4	Electronic Gear Denomin...	1	(0----65535)
6	10FA	Position Filter	0	ms(0----65535)
7	10D5	Check time of Reach Posi...	500	ms(0----65535)
8	10D6	Range of reach position ...	5	(0----4294967295)
9	10D8	Check time of position er...	0	ms(0----65535)
10	5020	position_window_time(F...	100	(0----65536)
11	5086	ReachPosition(For DS402...	1	H(00000000----FFFFFFFF)

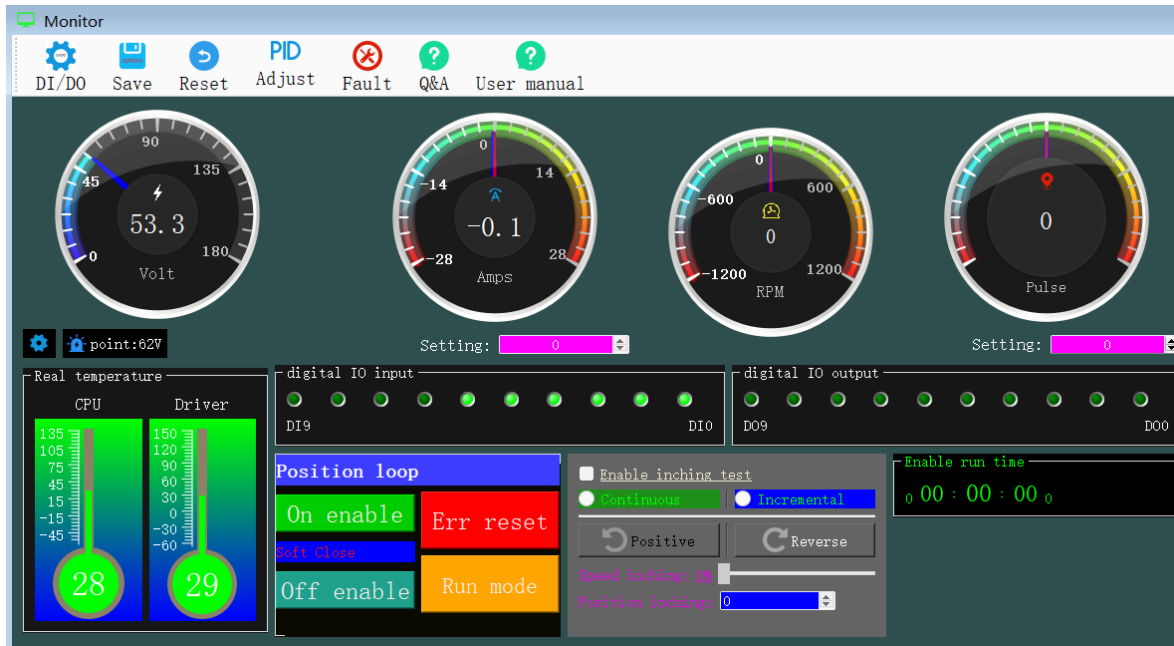
*Position loop setpoint
0: Address 0x1008(Absolute position loop) (RS485 setpoint)
1: Address 0x1008(Absolute position loop) (CAN setpoint)
2:CANOPEN position loop(auto-switch)
3: Direction+Pulse (Incremental position loop, valid after ...)

User notes

add ok

Step 4

-> On enable

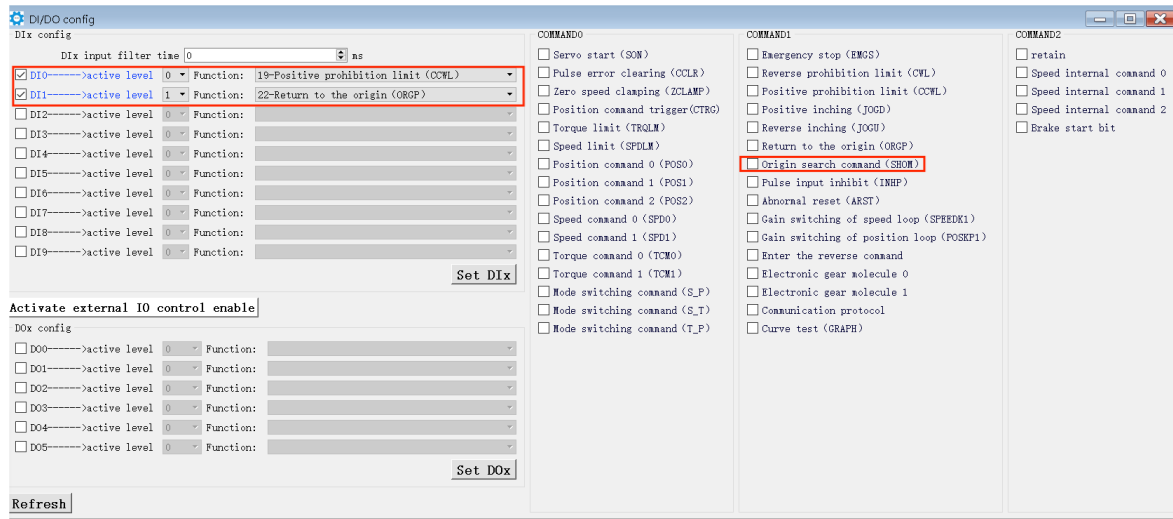


Step 5

-> DI/DO

-> click “Origin search command(SHOM)”

The steering motor begins to find the origin until the positive inching, that is, the forward limit signal is triggered, then the motor stops rotating, and the yellow light of the limit switch can be observed.



Step 6

-> Enter the number of pulses corresponding to the position in the setting

For example: 350000 (90°), -350000 (-90°)

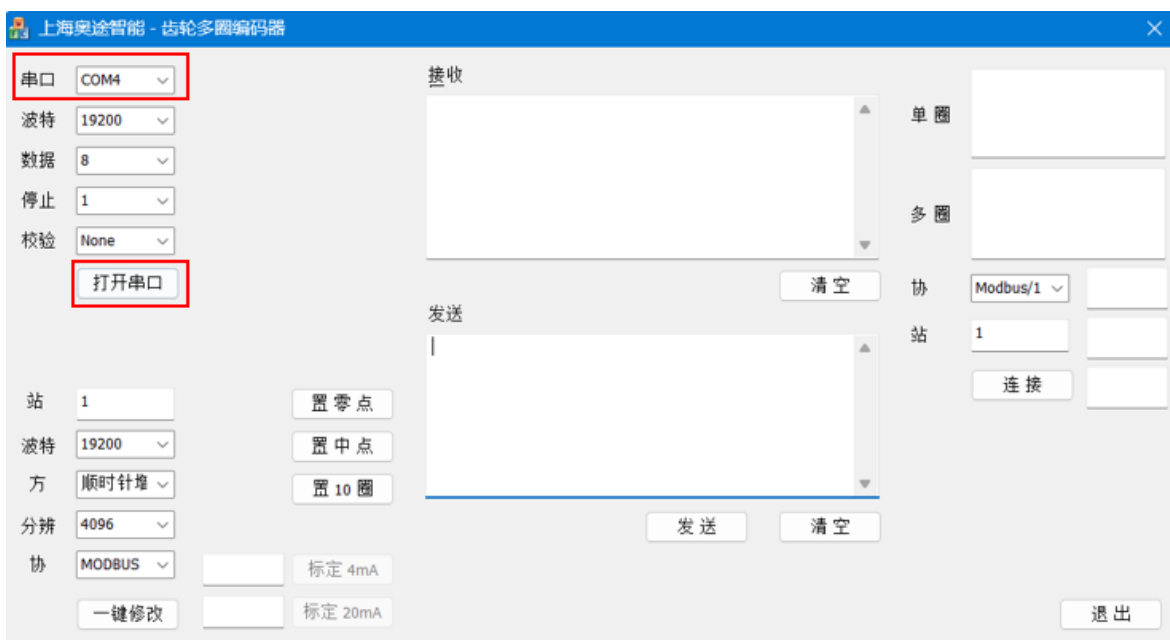


If the motor runs normally, the test is finished.

3.3 Absolute encoder test



1. Open the software , select the correct port number and click “Open Serial Port”.



2. Click “Connect” on the right side, if you can not receive data, you can try to modify the station number.



3. Use the MDSM host computer to turn the motor to the zero position, i.e., forward facing.

4. Using the absolute encoder host computer, click on “Zero position” to send the command.



5. then the absolute encoder is working properly and the test is complete.

4. Usage Examples

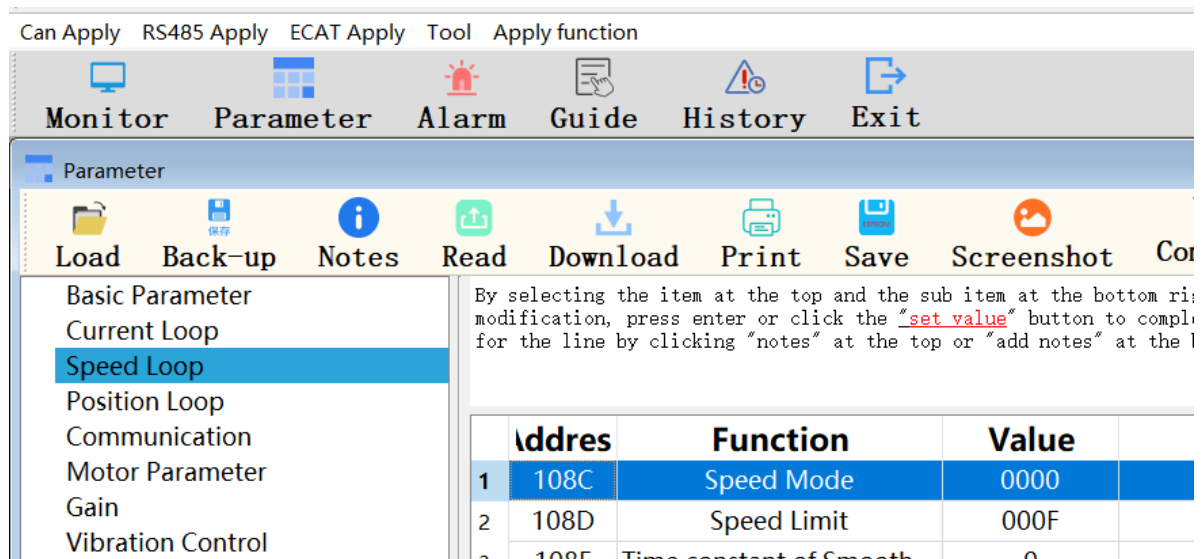
4.1 485modbus usage routines

4.1.1 Traveling motor control

-> Parameter

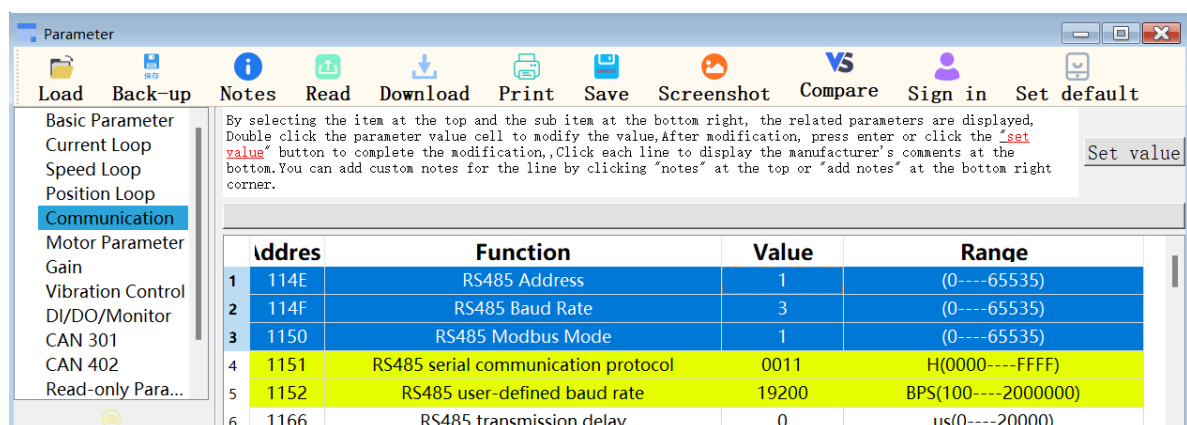
-> Speed Loop

-> set 108C Speed Loop 0000



-> Communication

-> set 114E RS485 Address 1
 114F RS485 Baud Rate 3
 1150 RS485 Modbus Mode 1



-> save

open the software Serial Port Utility

send the command

01 06 10 0a 00 01 6c c8 (Speed Mode)

01 06 10 00 00 0a 0d 0d (Enable)

01 10 10 02 00 02 04 00 64 00 00 fe 69 (Speed 100RPM)

01 10 10 02 00 02 04 00 00 00 00 BF B6(0RPM)

Motor rotation can be seen

01 06 10 00 00 01 4c ca (Disable)

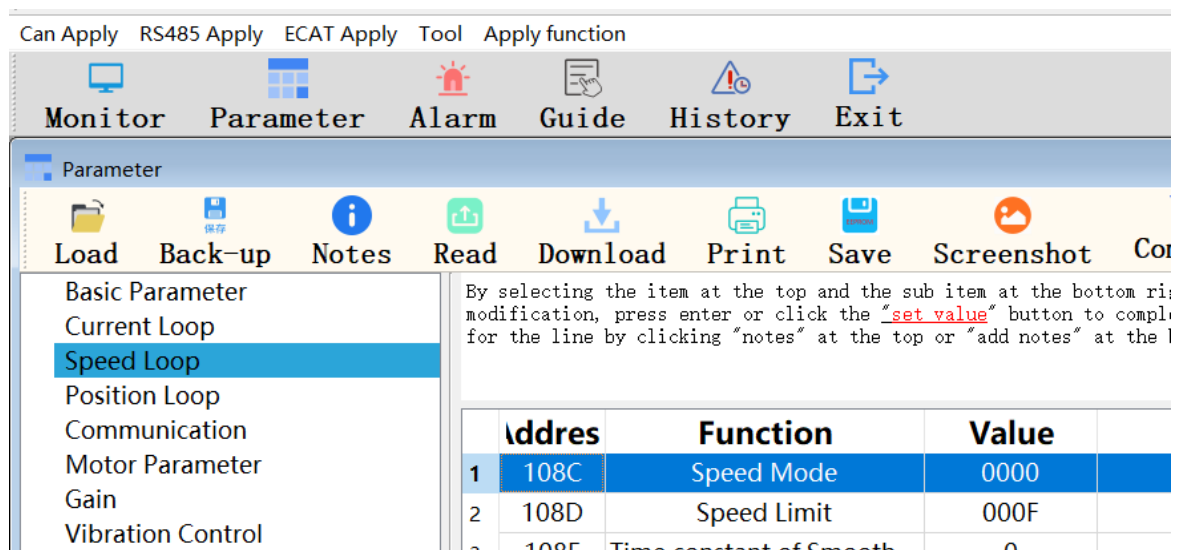
RS485 RTU Mode tested.

4.1.2 Steering motor control

-> Parameter

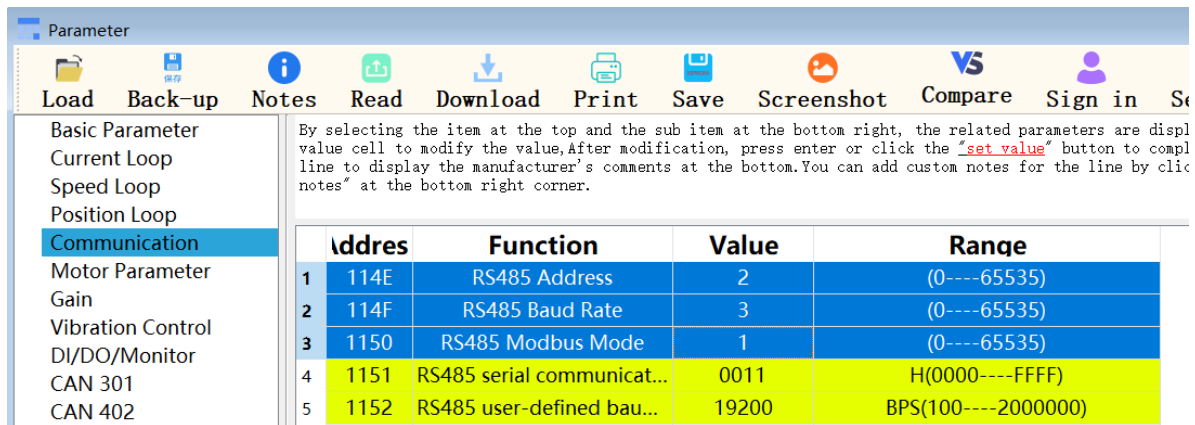
-> Speed Loop

-> set 108C Speed Loop 0000



-> Communication

-> set 114E RS485 Address 2
 114F RS485 Baud Rate 3
 1150 RS485 Modbus Mode 1



-> save

open the software Serial Port Utility

Start the zero search process.

02 06 10 00 00 0A 0D 3E (Send Enable Command)

02 06 10 0C 00 40 4C CA (Set bit6 of command1 to trigger zero seek.)

02 10 10 08 00 02 04 00 00 00 00 30 8D (Given position 0 to make the rudder wheel go straight ahead)

02 10 10 08 00 02 04 57 30 00 05 E0 F5(90°)

02 06 10 00 00 01 4C F9 (Disable)

RS485 RTU mode test completed

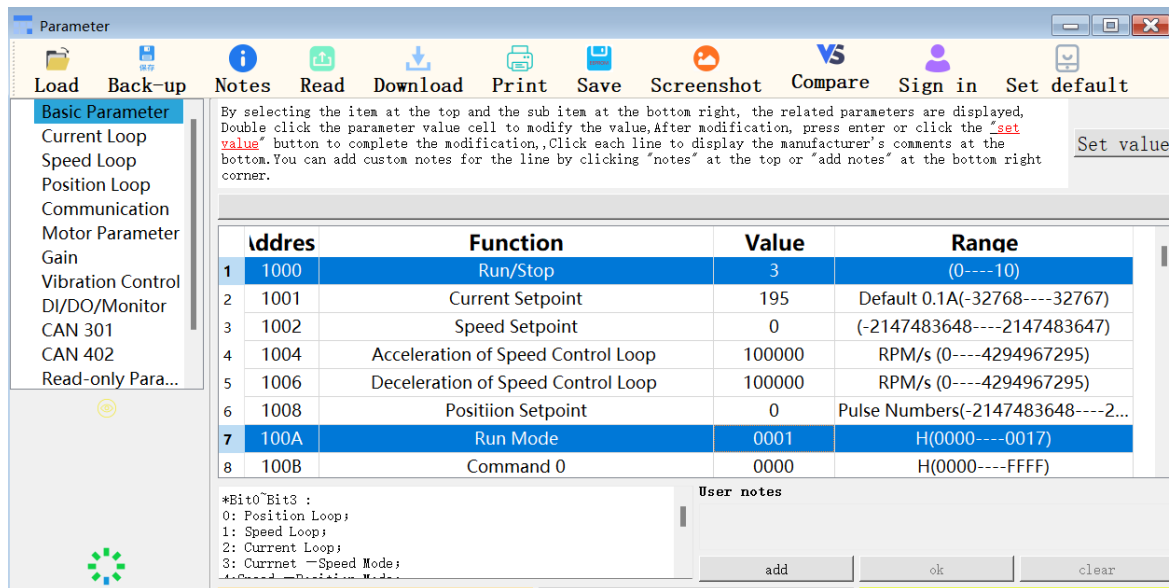
4.2 Canopen usage routines

4.2.1 Traveling motor control

Step 1

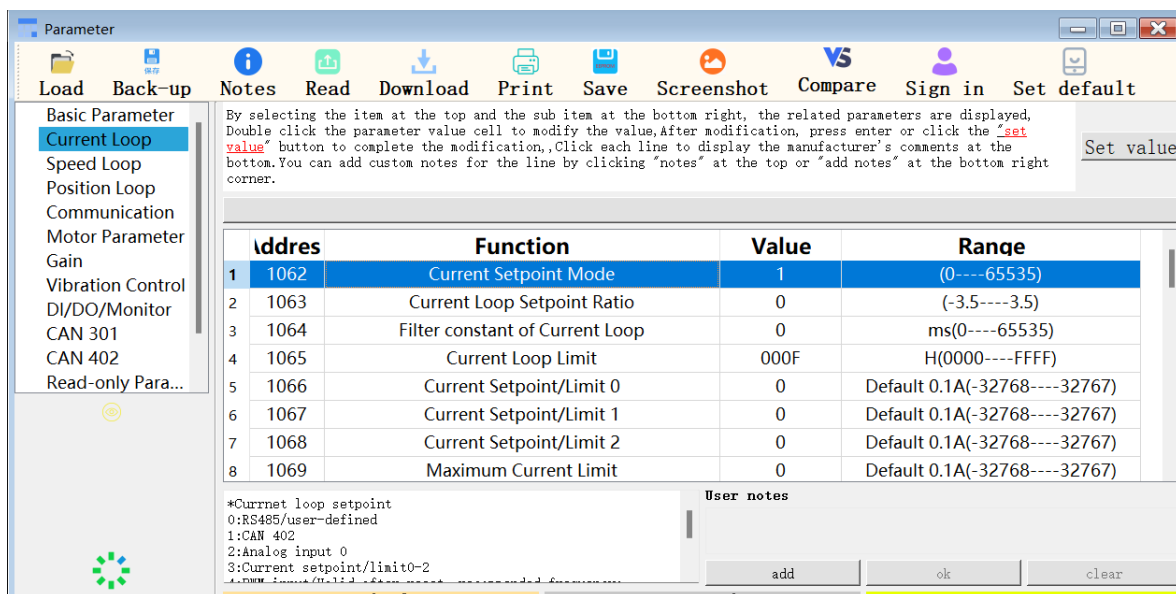
-> Basic Parameter

-> set 1000 Run/Stop 3
 100A Run Mode 0001



-> Current Loop

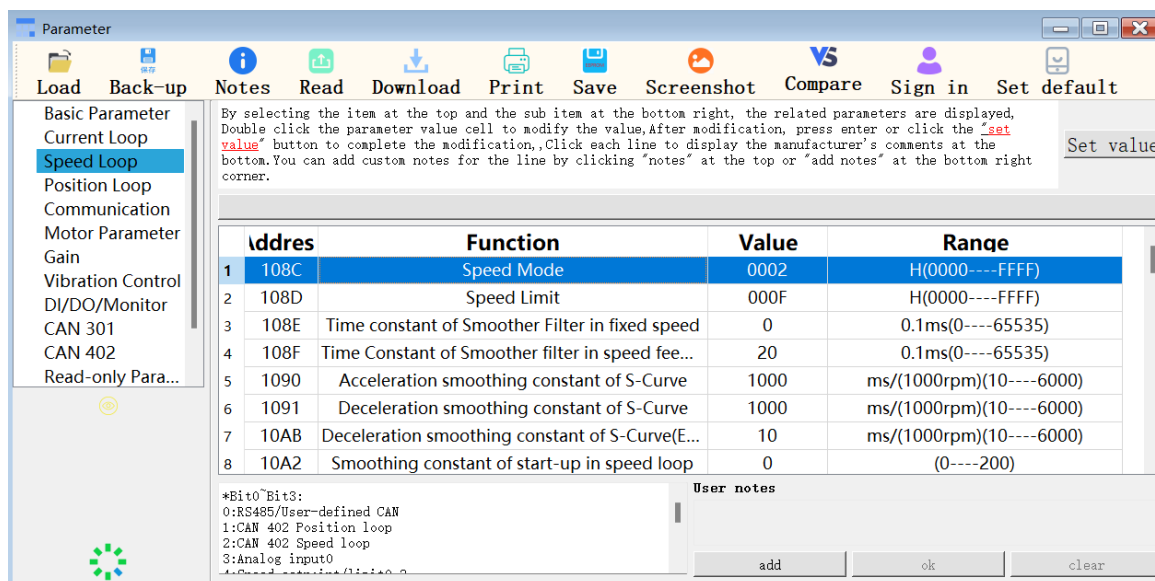
-> set 1062 Current Setpoint Mode 1



Step 2

-> Speed Loop

-> set 108C Speed Mode 0002



Step 3

Communication ->

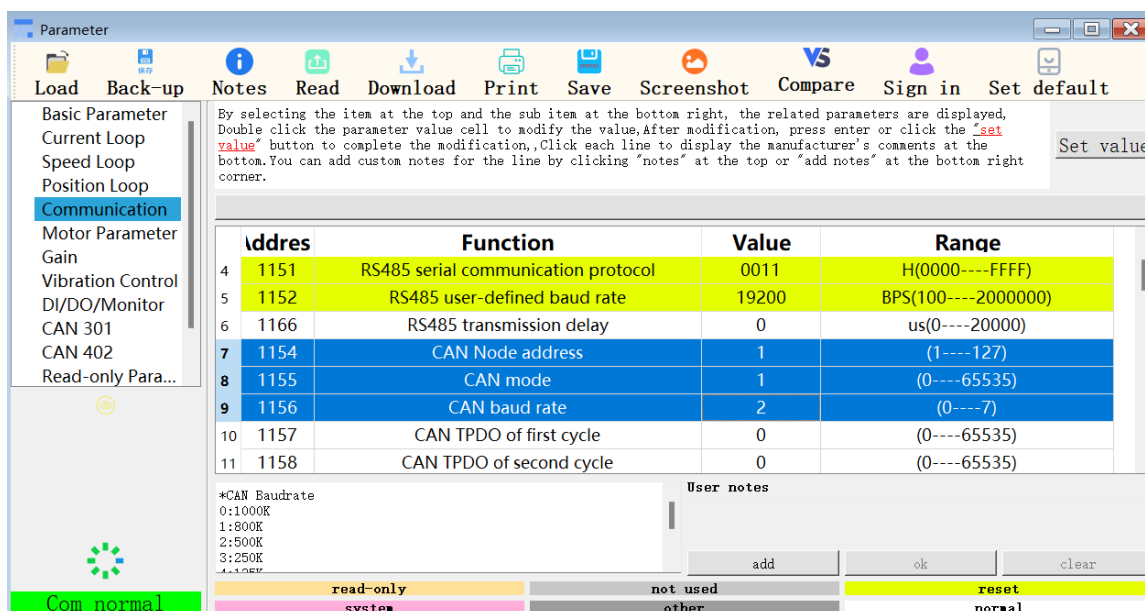
-> set

1154 CAN Node address 1

1155 CAN mode 1

1156 CAN baud rate 2

-> save



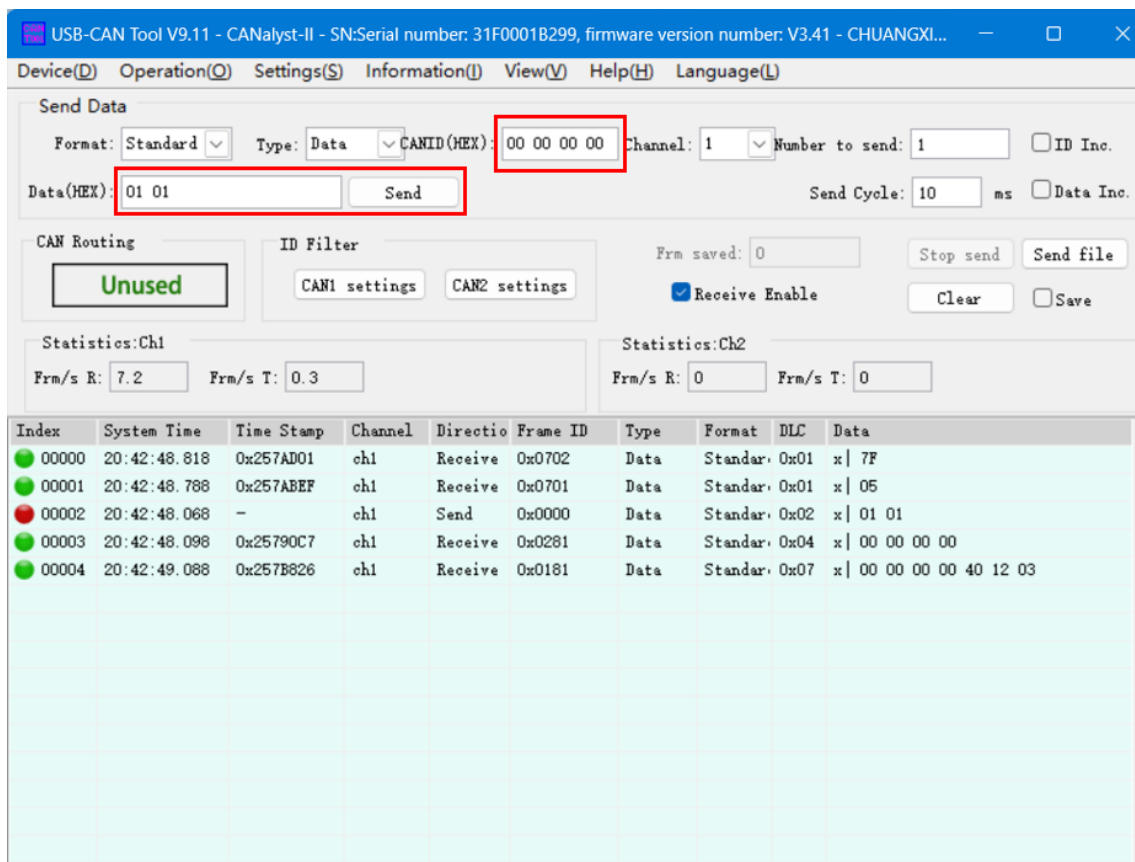
Step 4



-> Open

-> send the command one by one

Travel motor CAN message			
CANID	Command	Exegesis	
000	01 01	Enable Node 1	
601	2F 60 60 00 03	Speed Mode	
	2B 40 60 00 06 00	Enabling process	No servo faults → servo ready
	2B 40 60 00 07 00		Servo Ready → Servo Wait Enable
	2B 40 60 00 0F 00		Servo wait enable → servo run
	23 FF 60 00 C8 00 00 00	Given motor speed 200rpm	
	23 FF 60 00 38 FF FF FF	Given motor speed -200rpm	

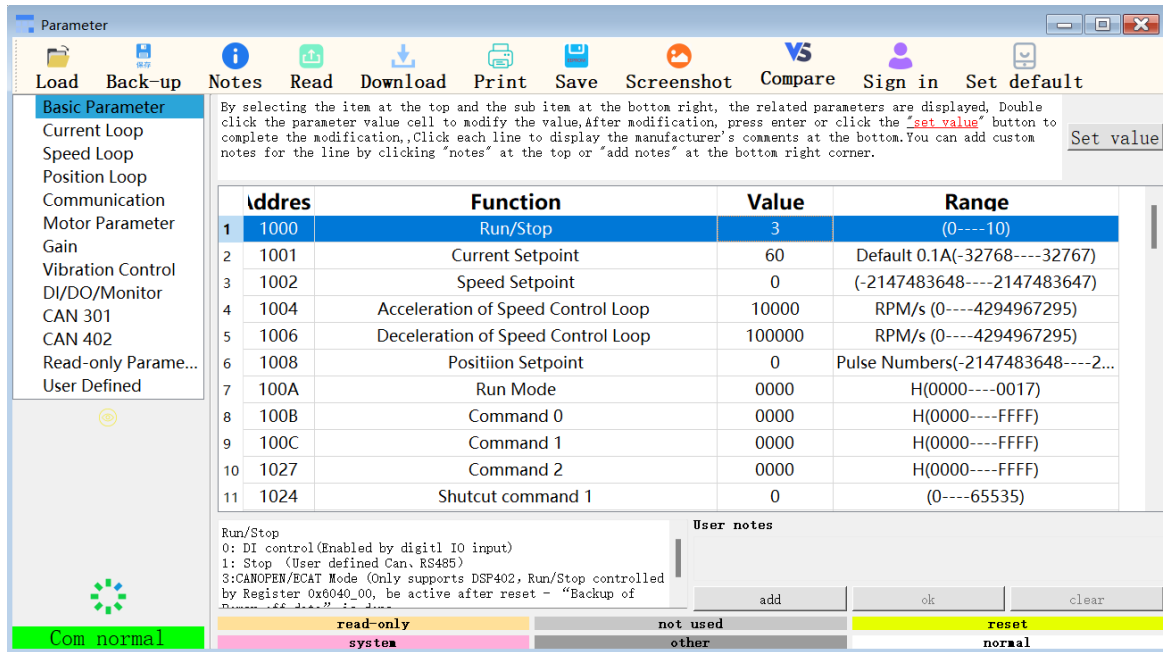


If the motor runs normally ,this way of the test is finished.

4.2.2 Steering motor control

-> Basic Parameter

-> set 1000 Run/Stop 3



Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in Set default

Basic Parameter

Current Loop

Speed Loop

Position Loop

Communication

Motor Parameter

Gain

Vibration Control

DI/DO/Monitor

CAN 301

CAN 402

Read-only Parame...

User Defined

Set value

Address	Function	Value	Range
1 1000	Run/Stop	3	(0----10)
2 1001	Current Setpoint	60	Default 0.1A(-32768----32767)
3 1002	Speed Setpoint	0	(-2147483648----2147483647)
4 1004	Acceleration of Speed Control Loop	10000	RPM/s (0----4294967295)
5 1006	Deceleration of Speed Control Loop	100000	RPM/s (0----4294967295)
6 1008	Position Setpoint	0	Pulse Numbers(-2147483648----2...
7 100A	Run Mode	0000	H(0000----0017)
8 100B	Command 0	0000	H(0000----FFFF)
9 100C	Command 1	0000	H(0000----FFFF)
10 1027	Command 2	0000	H(0000----FFFF)
11 1024	Shutcut command 1	0	(0----65535)

Run/Stop
0: DI control(Enabled by digitl IO input)
1: Stop (User defined Can. RS485)
3:CANOPEN/ECAT Mode (Only supports DSP402, Run/Stop controlled by Register 0x6040_00, be active after reset - "Backup of Run/Stop" is done)

User notes

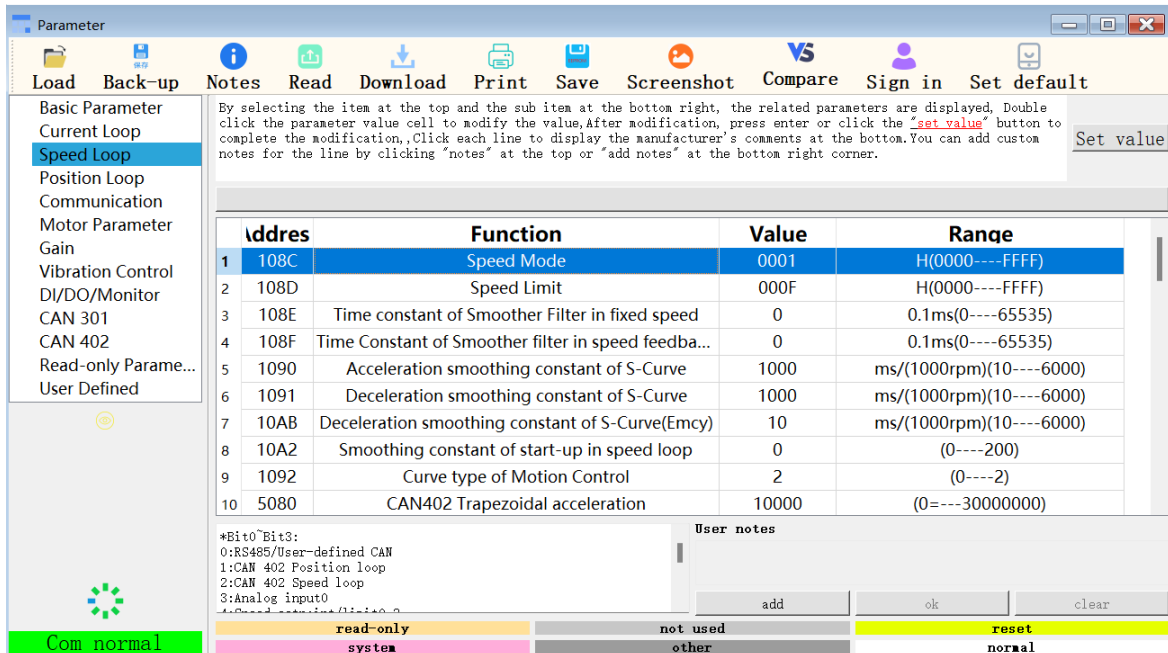
add ok clear

read-only not used reset
system other normal

Com normal

-> Speed Loop

-> set 108C Speed Mode 0001



Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in Set default

Basic Parameter

Current Loop

Speed Loop

Position Loop

Communication

Motor Parameter

Gain

Vibration Control

DI/DO/Monitor

CAN 301

CAN 402

Read-only Parame...

User Defined

Set value

Address	Function	Value	Range
1 108C	Speed Mode	0001	H(0000----FFFF)
2 108D	Speed Limit	000F	H(0000----FFFF)
3 108E	Time constant of Smoother Filter in fixed speed	0	0.1ms(0----65535)
4 108F	Time Constant of Smoother filter in speed feedba...	0	0.1ms(0----65535)
5 1090	Acceleration smoothing constant of S-Curve	1000	ms/(1000rpm)(10----6000)
6 1091	Deceleration smoothing constant of S-Curve	1000	ms/(1000rpm)(10----6000)
7 10AB	Deceleration smoothing constant of S-Curve(Emcy)	10	ms/(1000rpm)(10----6000)
8 10A2	Smoothing constant of start-up in speed loop	0	(0----200)
9 1092	Curve type of Motion Control	2	(0----2)
10 5080	CAN402 Trapezoidal acceleration	10000	(0----30000000)

*Bit0~Bit3:
0:RS485/User-defined CAN
1:CAN 402 Position loop
2:CAN 402 Speed loop
3:Analog input0

User notes

add ok clear

read-only not used reset
system other normal

Com normal

-> Position Loop

-> set

10D0 Position Loop Mode 2

10EA Find Home

0000

Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in Set default

Basic Parameter
Current Loop
Speed Loop
Position Loop
Communication
Motor Parameter
Gain
Vibration Control
DI/DO/Monitor
CAN 301
CAN 402
Read-only Parame...
User Defined

By selecting the item at the top and the sub item at the bottom right, the related parameters are displayed. Double click the parameter value cell to modify the value. After modification, press enter or click the "set value" button to complete the modification. Click each line to display the manufacturer's comments at the bottom. You can add custom notes for the line by clicking "notes" at the top or "add notes" at the bottom right corner.

Address	Function	Value	Range
1 10D0	Position Loop Mode	2	(0----65535)
2 10D1	Electronic Gear Numerate 0	1	(1----65535)
3 10D2	Electronic Gear Numerate 1	1	(1----65535)
4 10D3	Electronic Gear Numerate 2	1	(1----65535)
5 10D4	Electronic Gear Denominator	1	(0----65535)
6 10FA	Position Filter	0	ms(0----65535)
7 10D5	Check time of Reach Position	500	ms(0----65535)
8 10D6	Range of reach position error	5	(0----4294967295)
9 10D8	Check time of position error	0	ms(0----65535)
10 5020	position_window_time(For DS402 only)	100	(0----65536)
11 5086	ReachPosition(For DS402 only)	1	H(00000000----FFFFFFFF)

*Position loop setpoint
0: Address 0x1008(Absolute position loop) (RS485 setpoint)
1: Address 0x1008(Absolute position loop) (CAN setpoint)
2: CANOPEN position loop(auto-switch)
3: Direction+Pulse (Incremental position loop, valid after ...)

User notes

add ok clear

read-only not used reset
system other normal

Com normal

Parameter

Load Back-up Notes Read Download Print Save Screenshot Compare Sign in Set default

Basic Parameter
Current Loop
Speed Loop
Position Loop
Communication
Motor Parameter
Gain
Vibration Control
DI/DO/Monitor
CAN 301
CAN 402
Read-only Parame...
User Defined

By selecting the item at the top and the sub item at the bottom right, the related parameters are displayed. Double click the parameter value cell to modify the value. After modification, press enter or click the "set value" button to complete the modification. Click each line to display the manufacturer's comments at the bottom. You can add custom notes for the line by clicking "notes" at the top or "add notes" at the bottom right corner.

Address	Function	Value	Range
19 10E6	Motor Internal Position Command 6	0	(-2147483648----2147483647)
20 10E8	Motor Internal Position Command 7	0	(-2147483648----2147483647)
21 10EA	Find Home	0000	H(0000----FFFF)
22 10EB	Return to Home - Speed 0 (Non CANOPEN)	500	rpm or 0.1rpm(0----32767)
23 10EC	Return to Home - Speed 1 (Non CANOPEN)	100	rpm or 0.1rpm(0----32767)
24 10ED	Return to Home Mode (Non CANOPEN)	2	(0----37)
25 10EE	Postion of Home (Non CANOPEN)	511100	(-2147483648----2147483647)
26 5088	HomePosition	-511100	(-2147483648----2147483647)
27 509B	HomingMethod	2	(-32768----32767)
28 501C	SHOM_Speed32B0	500	(-2147483648----2147483647)
29 501E	SHOM_Speed32B1	100	(-2147483648----2147483647)

bit8~11: Compound mode:
0: Return to Home, by CANOPEN mode
1: Return to Home when power-up
2: Return to Home by command 1 bit6 (Valid in rising edge)
3: Reserved

User notes

add ok clear

read-only not used reset
system other normal

Com normal

-> Communication

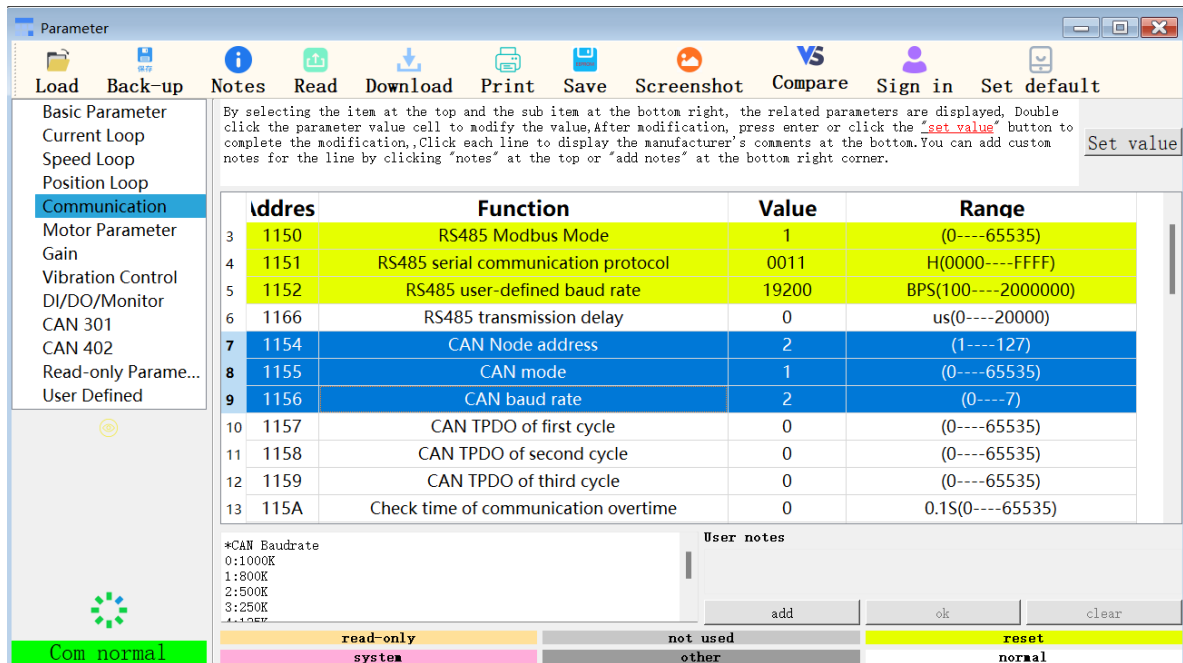
-> set

1154 CAN Node address 2

1155 CAN mode 1

1156 CAN baud rate 2

-> save



-> Open

-> send the command one by one

Steering motor CAN message		
CANID	Command	Exegesis
000	01 02	Enable Node 2
602	2F 60 60 00 06 00 00 00	(math.) origin reversion model
	2B 40 60 00 0F 00 00 00	Servo wait enable → servo run
	2B 40 60 00 1F 00 00 00	Start zero seeking (wait for the motor to stop rotating before continuing to send commands)
	2F 60 60 00 01 00 00 00	Position Mode
	23 7A 60 00 00 00 00 00	Setting the position zero point
	23 81 60 00 E8 03 00 00	Set speed to 1000 rpm
	2B 40 60 00 2F 00 00 00	Touch generator operation
	2B 40 60 00 3F 00 00 00	

USB-CAN Tool V9.11 - CANalyst-II - SN:Serial number: 31F0001B299, firmware version number: V3.41 - CHUANGXI...

Device(D) Operation(O) Settings(S) Information(I) View(V) Help(H) Language(L)

Send Data

Format: Standard Type: Data CANID(HEX): 00 00 00 00 Channel: 1 Number to send: 1 ☐ ID Inc.

Data(HEX): 01 02 Send Send Cycle: 10 ms ☐ Data Inc.

CAN Routing **ID Filter** Frm saved: 0 Stop send Send file

Unused CAN1 settings CAN2 settings ☒ Receive Enable Clear ☐ Save

Statistics:Ch1 Frm/s R: 14.1 Frm/s T: 0 **Statistics:Ch2** Frm/s R: 0 Frm/s T: 0

Index	System Time	Time Stamp	Channel	Directio	Frame ID	Type	Format	DLC	Data
00000	19:56:03.037	0xAC1585	chl	Receive	0x0702	Data	Standar	0x01	x 05
00001	19:56:02.946	0xAC1137	chl	Receive	0x0701	Data	Standar	0x01	x 7F
00002	19:55:32.973	-	chl	Send	0x0000	Data	Standar	0x02	x 01 02
00003	19:55:32.976	0xA780C6	chl	Receive	0x0282	Data	Standar	0x04	x 01 00 00 00
00004	19:56:03.276	0xAC1EC5	chl	Receive	0x0182	Data	Standar	0x07	x 01 00 00 00 40 02 06

USB-CAN Tool V9.11 - CANalyst-II - SN:Serial number: 31F0001B299, firmware version number: V3.41 - CHUANGXI...

Device(D) Operation(O) Settings(S) Information(I) View(V) Help(H) Language(L)

Send Data

Format: Standard Type: Data CANID(HEX): 00 00 06 02 Channel: 1 Number to send: 1 ☐ ID Inc.

Data(HEX): 2B 40 60 00 1F 00 00 00 Send Send Cycle: 10 ms ☐ Data Inc.

CAN Routing **ID Filter** Frm saved: 0 Stop send Send file

Unused CAN1 settings CAN2 settings ☒ Receive Enable Clear ☐ Save

Statistics:Ch1 Frm/s R: 233.9 Frm/s T: 0 **Statistics:Ch2** Frm/s R: 0 Frm/s T: 0

Index	System Time	Time Stamp	Channel	Directio	Frame ID	Type	Format	DLC	Data
00000	19:57:44.047	0xBB798D	chl	Receive	0x0702	Data	Standar	0x01	x 05
00001	19:57:43.927	0xBB753B	chl	Receive	0x0701	Data	Standar	0x01	x 7F
00002	19:55:32.973	-	chl	Send	0x0000	Data	Standar	0x02	x 01 02
00003	19:57:43.297	0xBB5CE9	chl	Receive	0x0282	Data	Standar	0x04	x 7C CC 07 00
00004	19:57:44.107	0xBB7C67	chl	Receive	0x0182	Data	Standar	0x07	x 7C CC 07 00 37 16 06
00005	19:57:33.847	0xB9EB61	chl	Receive	0x0582	Data	Standar	0x08	x 60 40 60 00 00 00 00 00
00006	19:57:33.818	-	chl	Send	0x0602	Data	Standar	0x08	x 2B 40 60 00 1F 00 00 00

The test is finished.