CT01 Quick Use Procedure

1. Wiring

CT01 has four leads, of which the red line is connected to the positive VCC of the power supply, the black line is connected to the negative GND of the power supply, the yellow line is connected to the RS485 line A+, and the green line is connected to the RS485 line B -. After the customer gets the machine, he can only connect VCC and GND. After the machine is powered on, it will start to work. The screen will display the collected CO2 value to check the basic situation of the machine, as shown in Figure 1



Figure 1

If the customer needs to take the machine for testing or configuration, all four wires should be connected, that is, VCC+, GND - should be connected to the corresponding power supply, RS485A+, RS485B - should be connected to the corresponding 485 transfer device, and the configuration can be carried out until the communication can be normal. If the customer does not have his own software to test, he can use modbus poll software. See steps 3 to 7 for the specific test method

2. Turn on electricity

After wiring is completed, power on is required. The CT01 supports a power supply voltage of $5\sim36V$. After power on, the machine display screen will display data and the indicator light will be red

3. Open modbus poll software

Open the modbus poll software, click setup, and select Read/Write Definition, as shown in Figure 2

	etup Functions Display \	lew Window		
) 🖻 🖬 🎒 🗙 📋	Read/Write Definition	F8	2 8 №	
9 Mbpoll1	Read/Write Once	F6		
x = 0: Err = 0: ID = 1	Read/Write Disabled	Shift+F6		
to connection	Excel Log	Alt+X		
Alias	Excel Logging Off	Alt+Q		
0	Log	Alt+L		
1	Logging Off	Alt+O		
2	Reset Counters	F12		=
3	Reset All Counters	Shift+F12		
4	Use as Default			
5	0			
6	0			

Figure 2

4. Parameter Setting

According to the modification in Figure 3, the slave ID is the host address, which should be consistent with the CT01 address before communication (the CT01 address is set through the dial switch); Quantity is the number of registers, and CT01 has 9 registers. Click "OK" after

modification

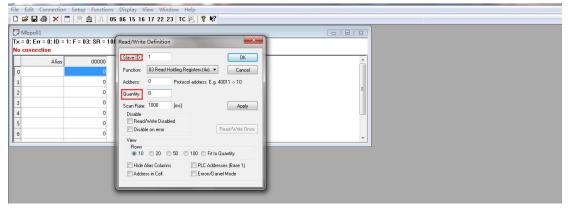


Figure 3

5. Use of dial switch



Figure 4

Note: The dial switch in Figure 4 has 8 dial bits in total. The numbers corresponding to 1-8 are 128, 64, 32, 16, 8, 4, 2, and 1. Since the "8" dial bit in Figure 4 has been turned to ON, the address of CT01 is 1. If multiple dial bits are ON, the address is the sum of the values of each dial bit

6. connection

Click connection and select connect, as shown in Figure 5

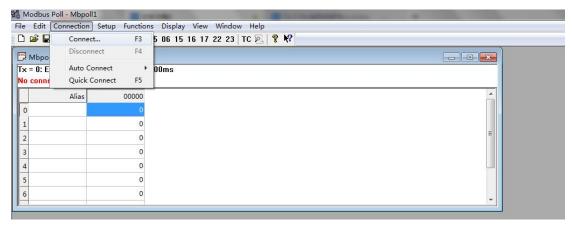


Figure 5

7. Port and baud rate

Modify according to Figure 6, where the port COM is determined according to the computer port; The baud rate defaults to 9600, which should be consistent with CT01 before communication; Others remain unchanged. Click "OK" after setting

A Received and the second	= 0: ID = 1: F	= 03: SR = 1000ms	Connection Setup	-	_	×	
connect	tion		Connection		1 -		
	Alias	00000	Serial Port	•		ок	ć
		0				Cancel	
		0	Serial Settings	2000			
		0	USB-SERIAL CH340	(COM4) •	Mode RTU	ASCII ASCII ASCII ASCII ASCII ASCII	
		0	9600 Baud 🔻				
		0	8 Data bits 🔻		Response		
		0	None Parity 👻		1000	[ms]	
		0			Delay Betw	veen Polls	
			1 Stop Bit 💌	Advanced	20	[ms]	
			Remote Modbus Serve	1			
			IP Address or Node Na	ame			
			127.0.0.1			*	
			Server Port	Connect Timeout	IPv4		

Figure 6

8. CO2 concentration

After completing the above steps, CT01 can communicate with the host. As shown in Figure 7, the CO2 concentration is 1203ppm

Mbpoll1			
= 665: Err = 0: ID =	: 1: F = 03: SR = 1000m:	S	
Alias	00000		
)	32767		
L	32767		
2	0		
3	599	CO2 concentration	
1	1		
5	9600		
5	1793		
7	17		
3			
)			

Figure 7

If communication cannot be achieved by following the above steps, please check the following information: whether the wiring is connected properly, whether the power supply is normal, whether the address code is consistent with the master and slave, and whether the baud rate is consistent with the master and slave