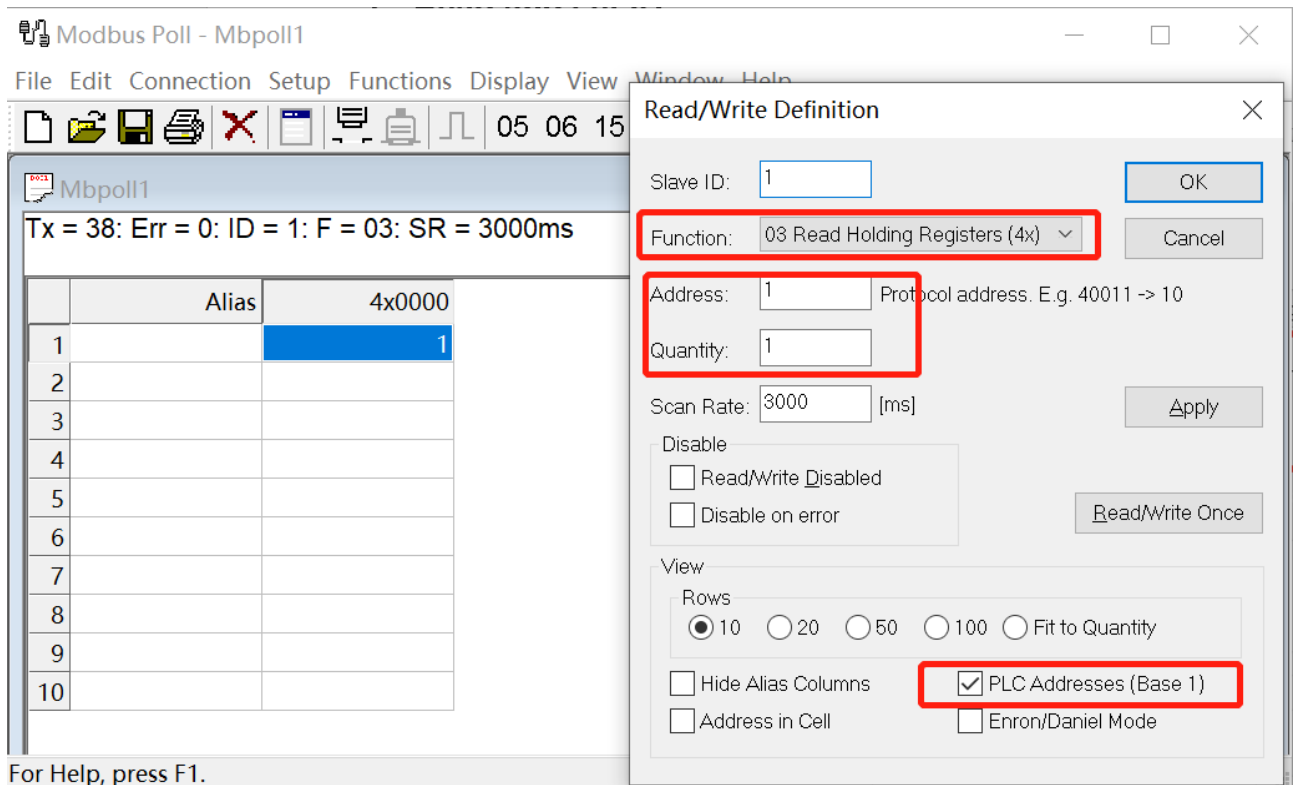


## Set and Read CWT-BK series Modbus IO Module by Modbus Poll

### 1. Read and set ID

ID register address is 40001

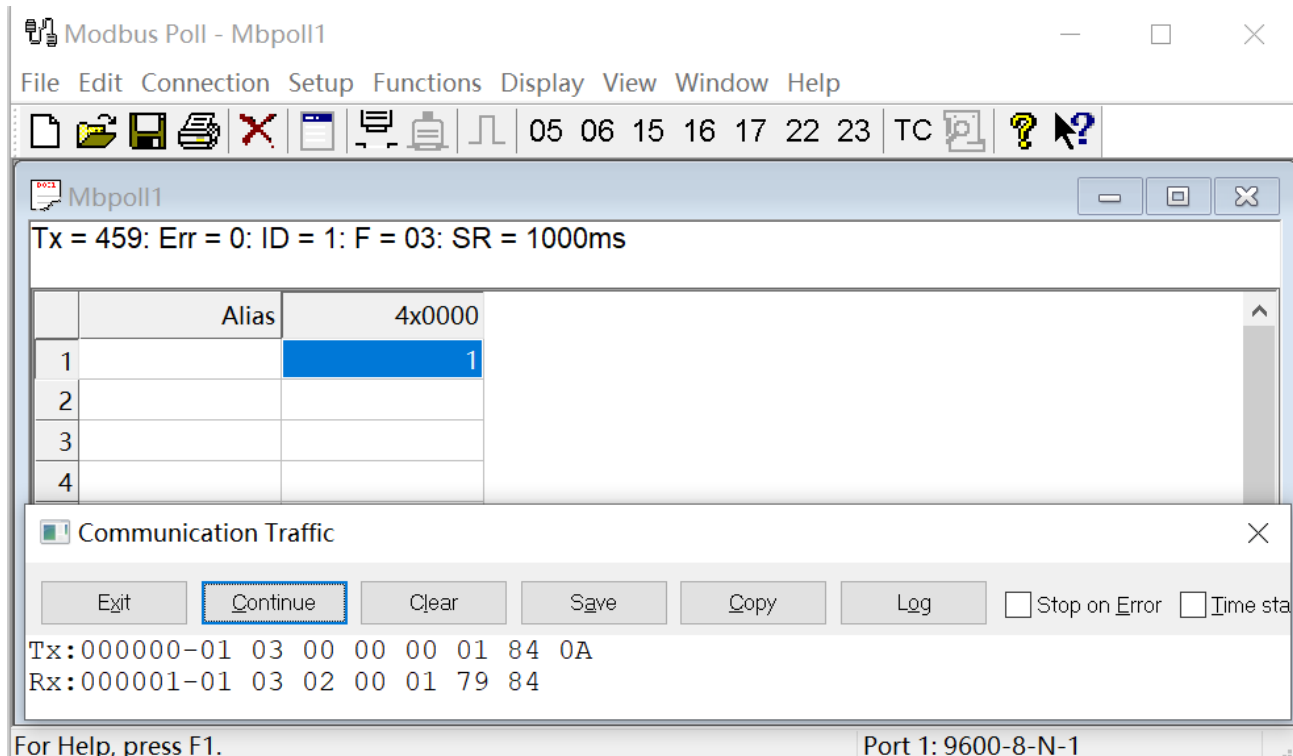
Read ID



The screenshot shows the Modbus Poll - Mbpoll1 window. The main window displays a table with 10 rows and 3 columns: Alias, 4x0000, and a value. The first row has a value of 1. The status bar at the bottom indicates 'Tx = 38: Err = 0: ID = 1: F = 03: SR = 3000ms'.

The 'Read/Write Definition' dialog box is open, showing the following settings:

- Slave ID: 1
- Function: 03 Read Holding Registers (4x)
- Address: 1
- Quantity: 1
- Scan Rate: 3000 [ms]
- Disable: ☐ Read/Write Disabled, ☐ Disable on error
- View: Rows (10, 20, 50, 100, Fit to Quantity), ☒ PLC Addresses (Base 1)

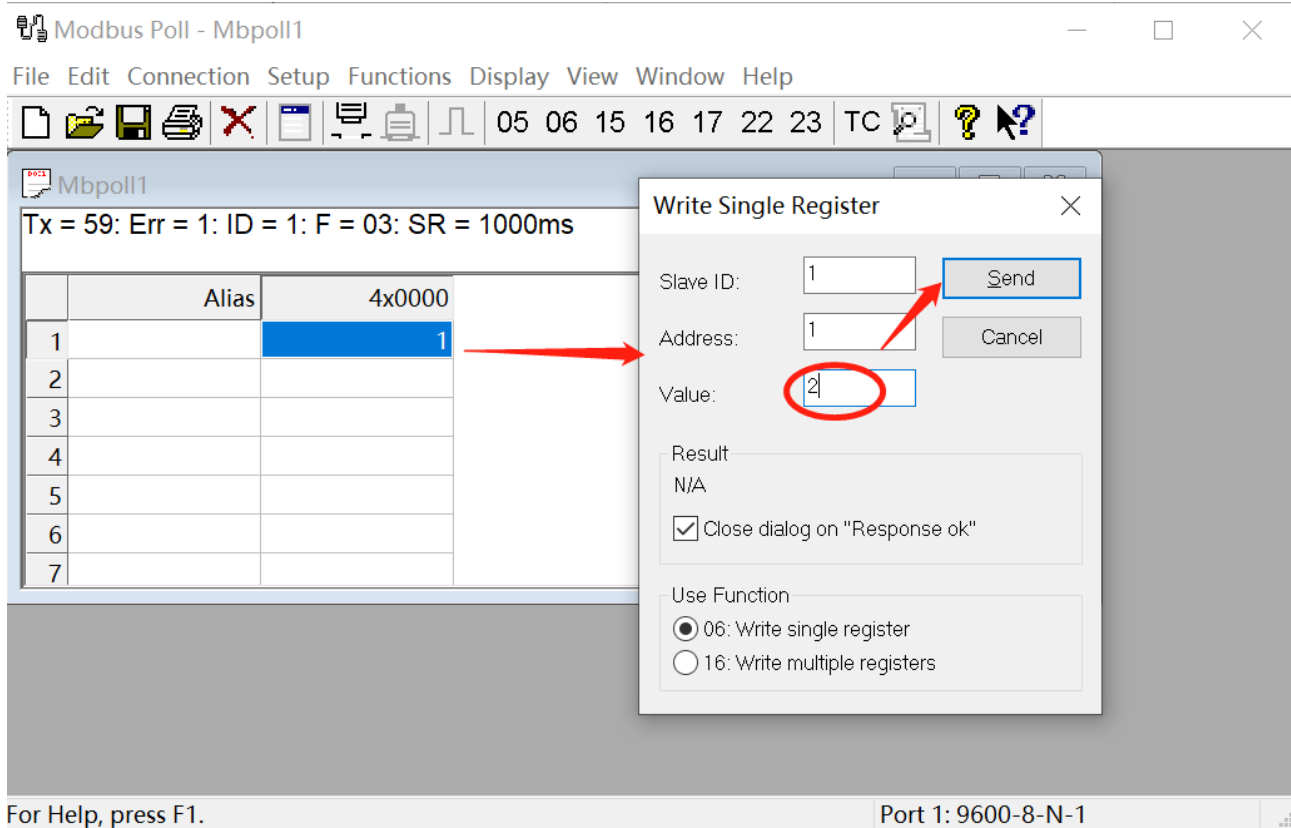


The screenshot shows the Modbus Poll - Mbpoll1 window. The main window displays a table with 4 rows and 3 columns: Alias, 4x0000, and a value. The first row has a value of 1. The status bar at the bottom indicates 'Tx = 459: Err = 0: ID = 1: F = 03: SR = 1000ms'.

The 'Communication Traffic' window is open, showing the following data:

- Tx: 000000-01 03 00 00 00 01 84 0A
- Rx: 000001-01 03 02 00 01 79 84

Set ID, for example, set ID=2



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 59: Err = 1: ID = 1: F = 03: SR = 1000ms

	Alias	4x0000
1		1
2		
3		
4		
5		
6		
7		

Write Single Register

Slave ID: 1

Address: 1

Value: 2

Result: N/A

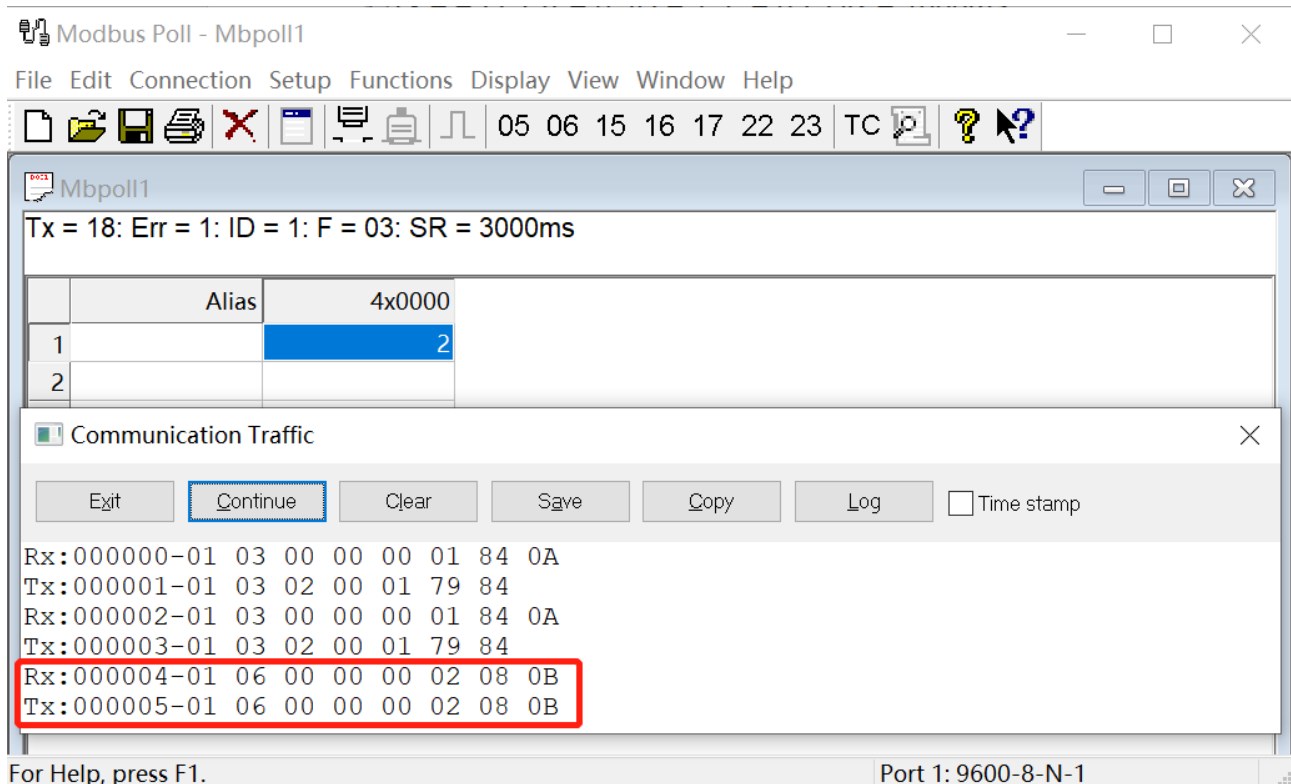
☒ Close dialog on "Response ok"

Use Function

☒ 06: Write single register

☐ 16: Write multiple registers

For Help, press F1. Port 1: 9600-8-N-1



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 18: Err = 1: ID = 1: F = 03: SR = 3000ms

	Alias	4x0000
1		2
2		

Communication Traffic

Exit Continue Clear Save Copy Log ☐ Time stamp

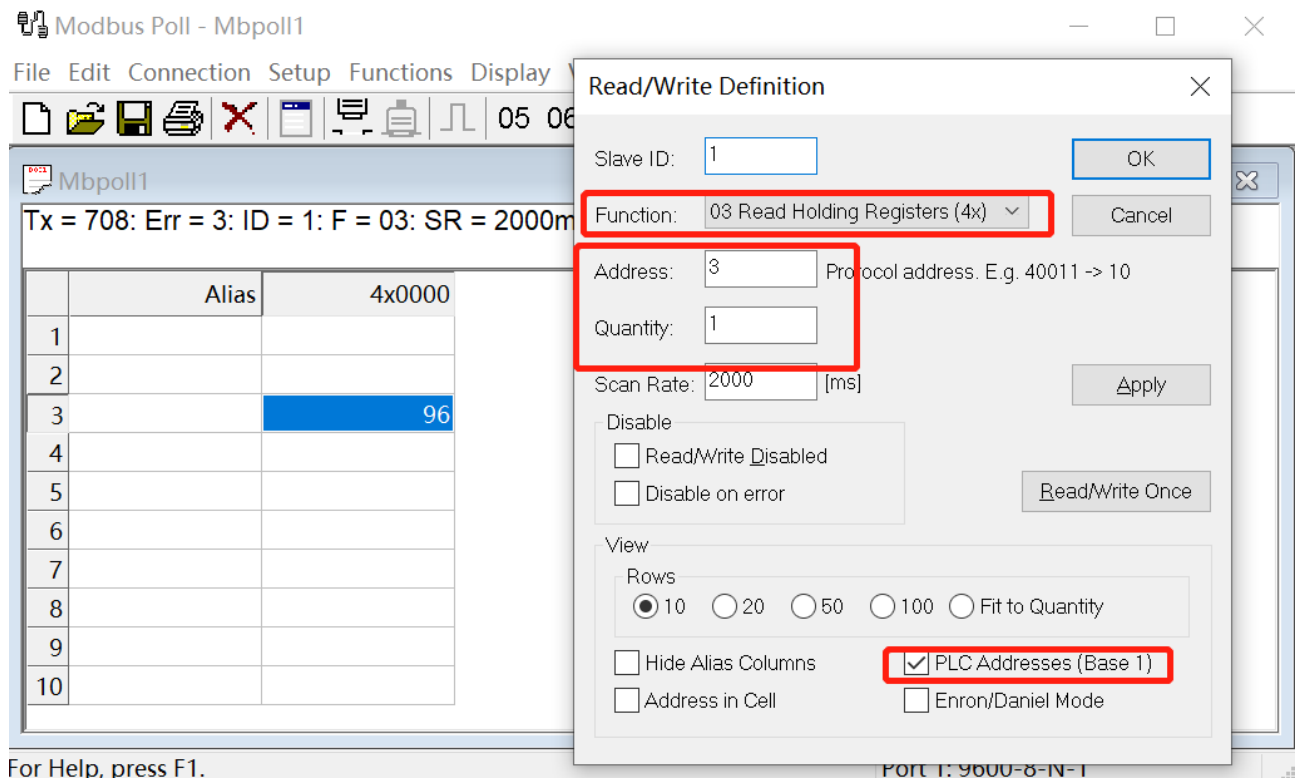
Rx:000000-01 03 00 00 00 01 84 0A  
 Tx:000001-01 03 02 00 01 79 84  
 Rx:000002-01 03 00 00 00 01 84 0A  
 Tx:000003-01 03 02 00 01 79 84  
 Rx:000004-01 06 00 00 00 02 08 0B  
 Tx:000005-01 06 00 00 00 02 08 0B

For Help, press F1. Port 1: 9600-8-N-1

## 2. Read and set baud

baud address is 40003

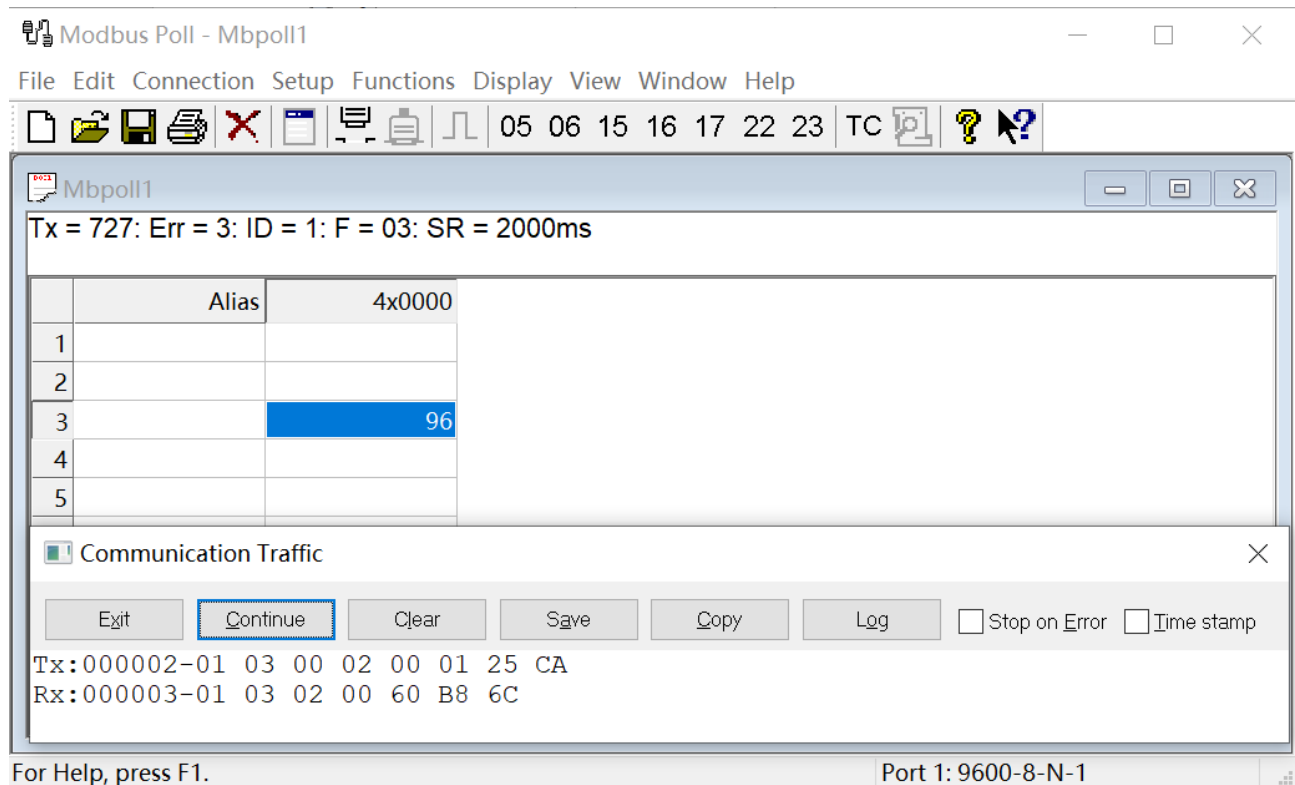
read baud:



The screenshot shows the Modbus Poll - Mbpoll1 application window. The main window displays a table with columns 'Alias' and '4x0000'. The table has 10 rows, with row 3 highlighted in blue and containing the value '96'. The status bar at the bottom indicates 'Tx = 708: Err = 3: ID = 1: F = 03: SR = 2000ms'. A 'Read/Write Definition' dialog box is open, showing the following settings:

- Slave ID: 1
- Function: 03 Read Holding Registers (4x)
- Address: 3
- Quantity: 1
- Scan Rate: 2000 [ms]
- Disable: ☐ Read/Write Disabled, ☐ Disable on error
- View: Rows (10 selected), 20, 50, 100, Fit to Quantity
- ☐ Hide Alias Columns
- ☒ PLC Addresses (Base 1)
- ☐ Address in Cell
- ☐ Enron/Daniel Mode

Buttons in the dialog include OK, Cancel, Apply, and Read/Write Once.



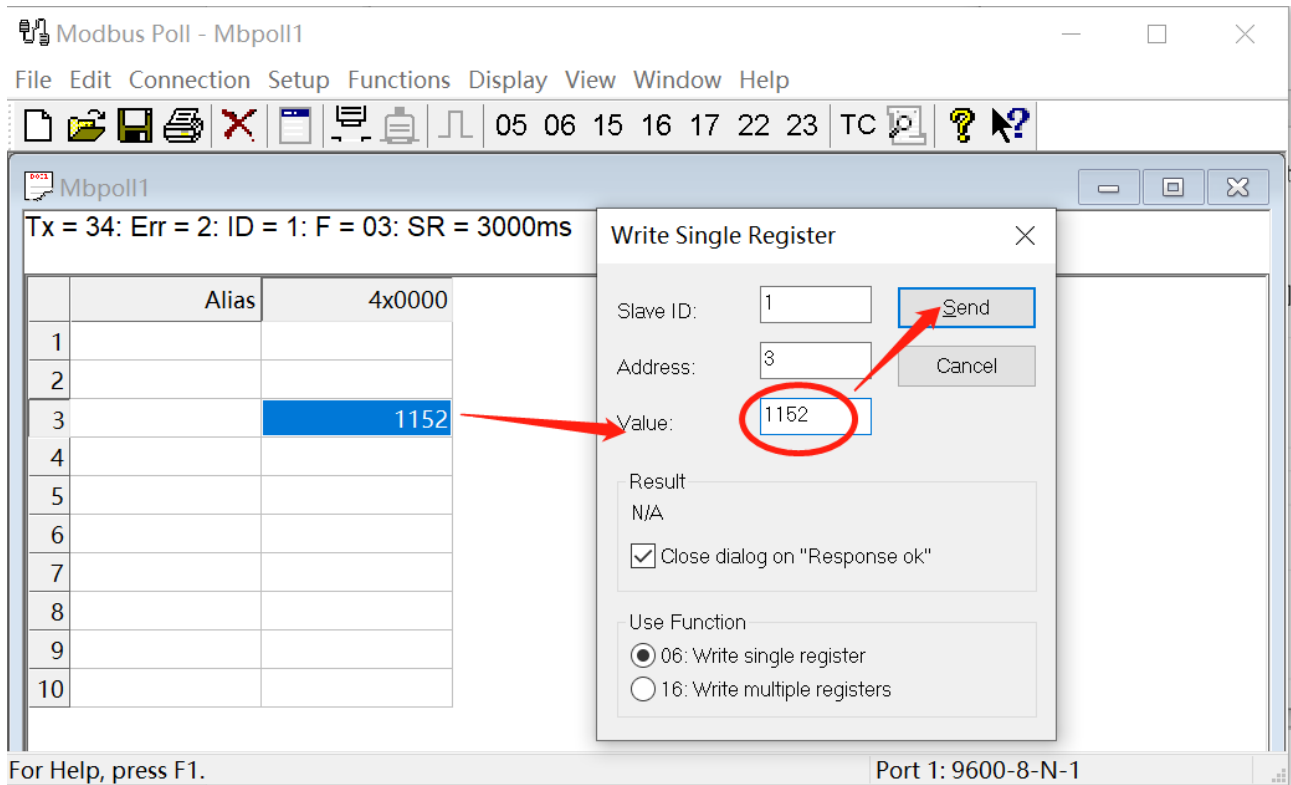
The screenshot shows the Modbus Poll - Mbpoll1 application window. The main window displays a table with columns 'Alias' and '4x0000'. The table has 5 rows, with row 3 highlighted in blue and containing the value '96'. The status bar at the bottom indicates 'Tx = 727: Err = 3: ID = 1: F = 03: SR = 2000ms'. A 'Communication Traffic' window is open, showing the following data:

- Tx: 000002-01 03 00 02 00 01 25 CA
- Rx: 000003-01 03 02 00 60 B8 6C

Buttons in the window include Exit, Continue, Clear, Save, Copy, Log, Stop on Error, and Time stamp.

Read baud: 48=4800bps, 96=9600bps, 192=19200bps, 1152=115200bps

Set baud, fox example set baud=115200



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 34: Err = 2: ID = 1: F = 03: SR = 3000ms

	Alias	4x0000
1		
2		
3		1152
4		
5		
6		
7		
8		
9		
10		

Write Single Register

Slave ID: 1

Address: 3

Value: 1152

Result: N/A

☒ Close dialog on "Response ok"

Use Function

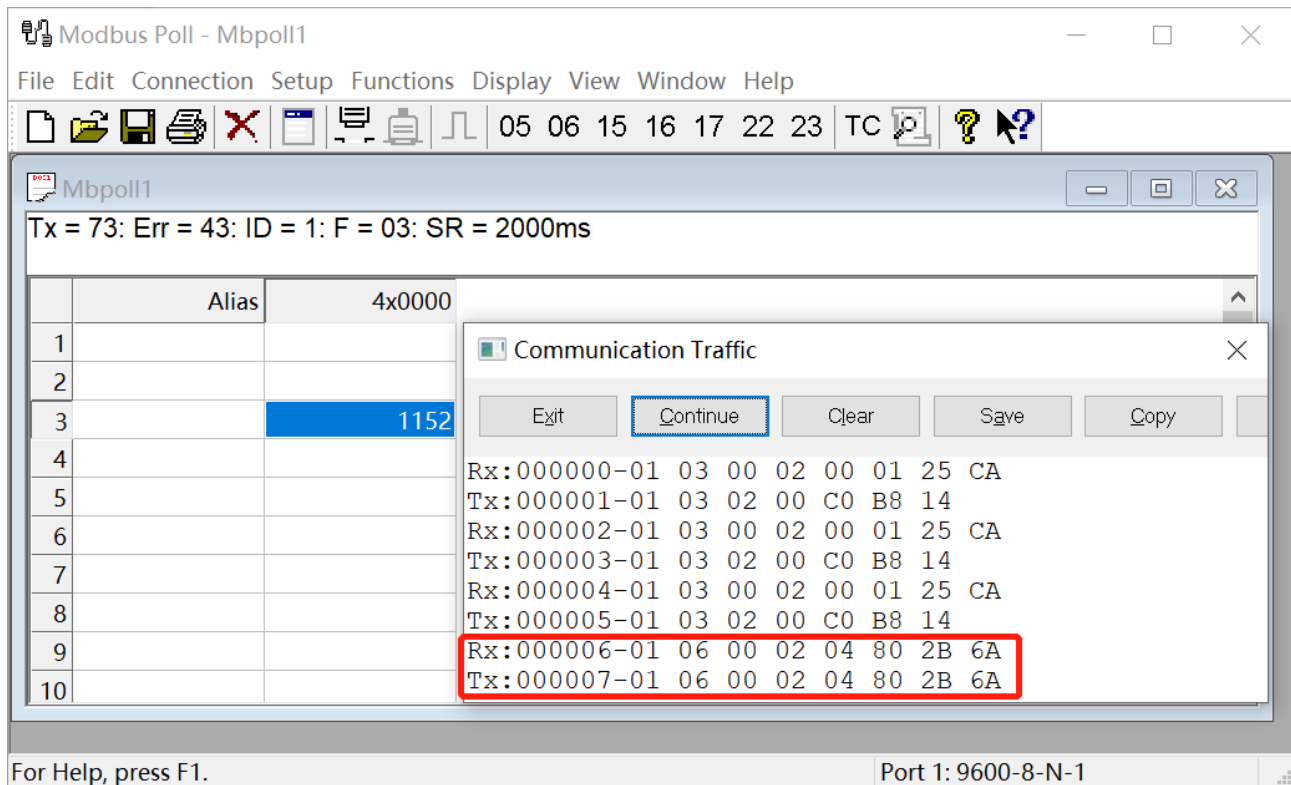
☒ 06: Write single register

☐ 16: Write multiple registers

Send

Cancel

For Help, press F1. Port 1: 9600-8-N-1



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 73: Err = 43: ID = 1: F = 03: SR = 2000ms

	Alias	4x0000
1		
2		
3		1152
4		
5		
6		
7		
8		
9		
10		

Communication Traffic

Exit Continue Clear Save Copy

Rx:000000-01 03 00 02 00 01 25 CA

Tx:000001-01 03 02 00 C0 B8 14

Rx:000002-01 03 00 02 00 01 25 CA

Tx:000003-01 03 02 00 C0 B8 14

Rx:000004-01 03 00 02 00 01 25 CA

Tx:000005-01 03 02 00 C0 B8 14

Rx:000006-01 06 00 02 04 80 2B 6A

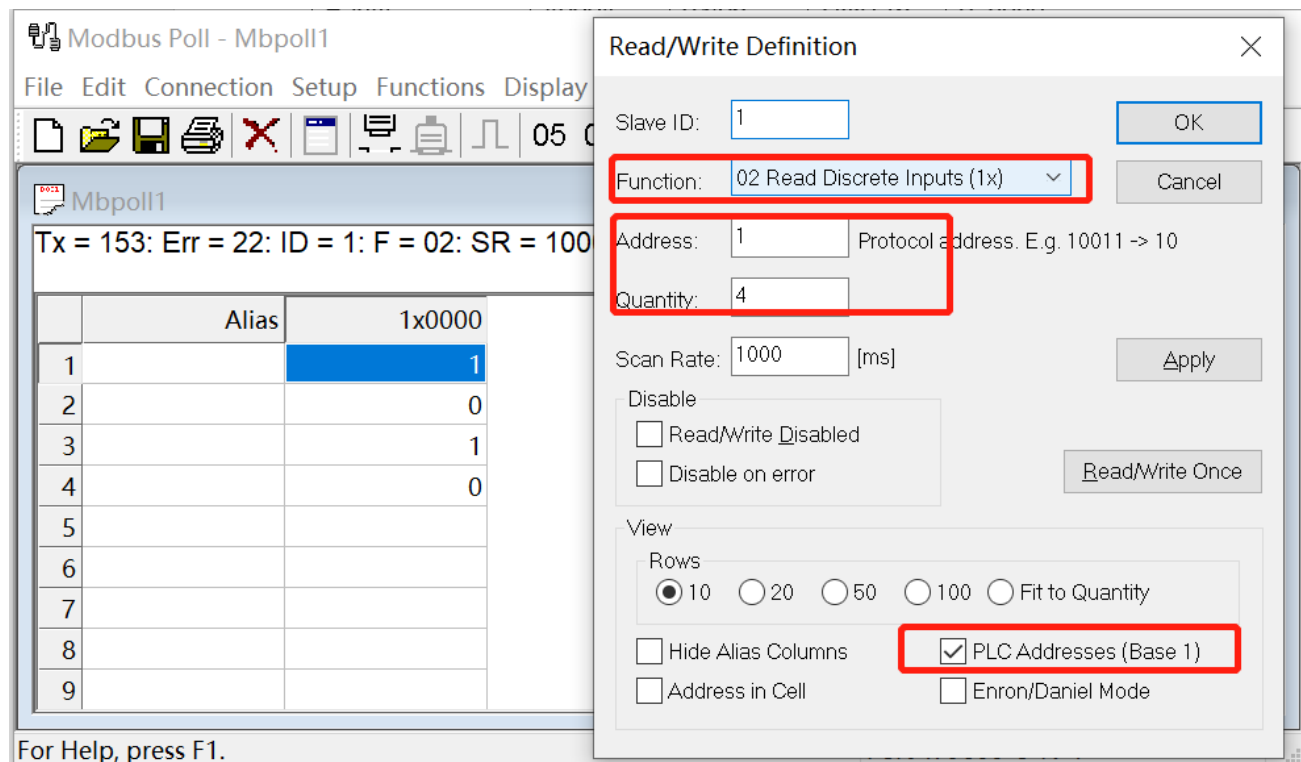
Tx:000007-01 06 00 02 04 80 2B 6A

For Help, press F1. Port 1: 9600-8-N-1

### 3. Read digital input

Di start address is 10001

For example, read Di0-Di3



**Read/Write Definition**

Slave ID: 1

Function: 02 Read Discrete Inputs (1x)

Address: 1 Protocol address. E.g. 10011 -> 10

Quantity: 4

Scan Rate: 1000 [ms]

Disable

☐ Read/Write Disabled

☐ Disable on error

View

Rows

☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ Fit to Quantity

☐ Hide Alias Columns ☒ PLC Addresses (Base 1)

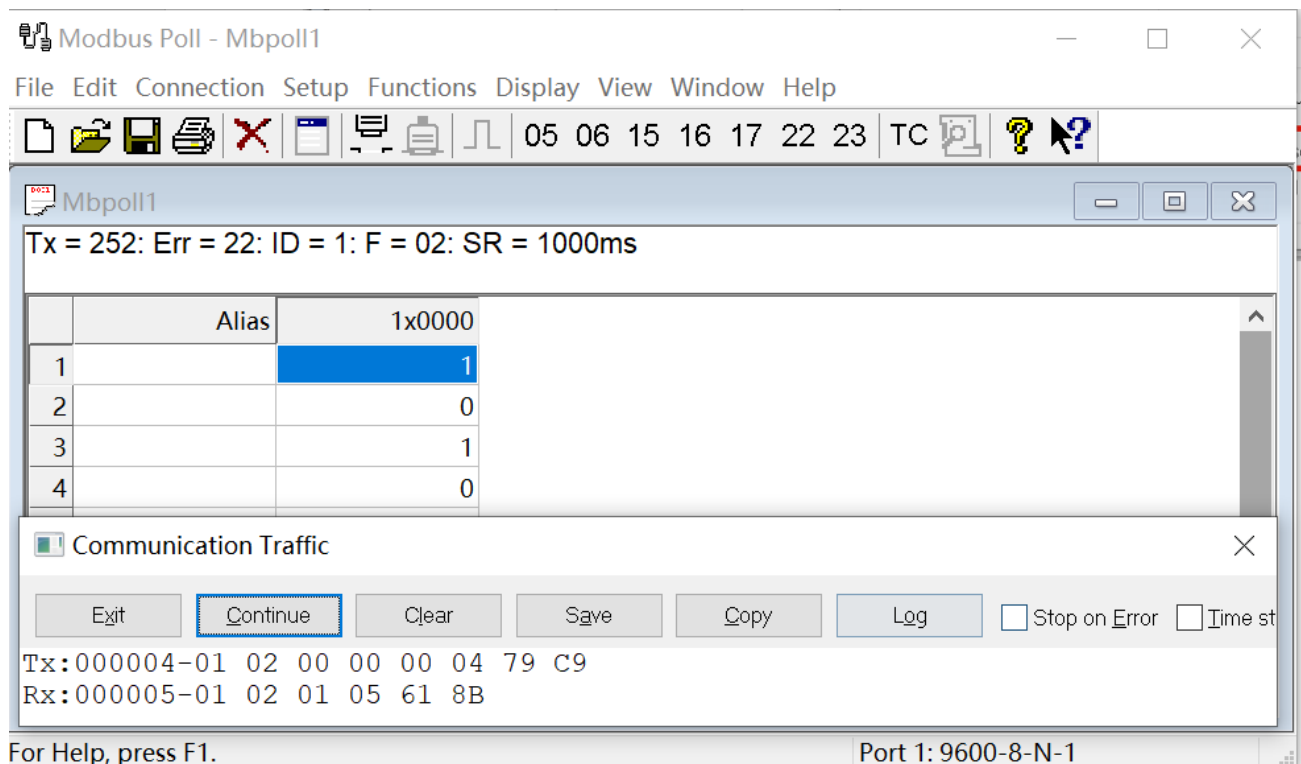
☐ Address in Cell ☐ Enron/Daniel Mode

Buttons: OK, Cancel, Apply, Read/Write Once

Background Table:

	Alias	1x0000
1		1
2		0
3		1
4		0
5		
6		
7		
8		
9		

For Help, press F1.



**Modbus Poll - Mbpoll1**

File Edit Connection Setup Functions Display View Window Help

Tx = 252: Err = 22: ID = 1: F = 02: SR = 1000ms

Background Table:

	Alias	1x0000
1		1
2		0
3		1
4		0

**Communication Traffic**

Exit Continue Clear Save Copy Log ☐ Stop on Error ☐ Time st

Tx: 000004-01 02 00 00 00 04 79 C9

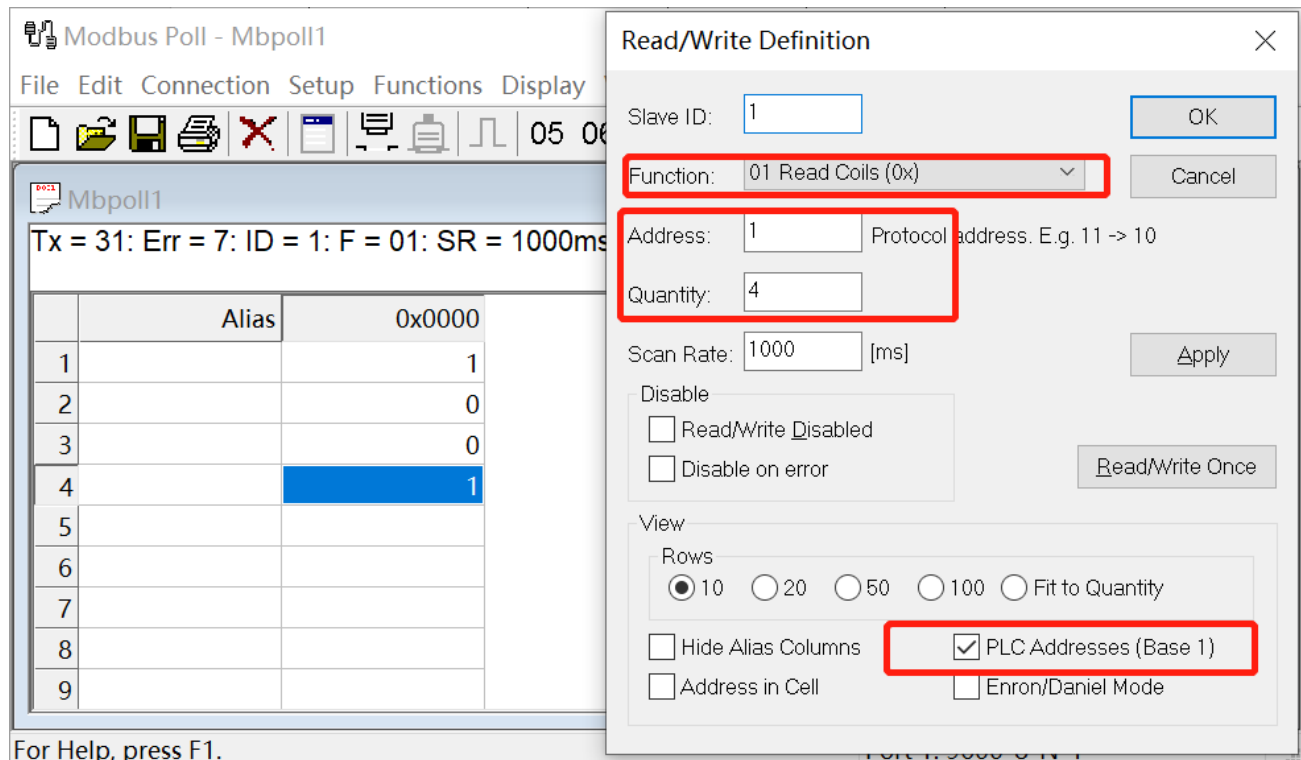
Rx: 000005-01 02 01 05 61 8B

For Help, press F1. Port 1: 9600-8-N-1

#### 4. Read and write digital output

Do start address is 00001

For example, read Do0-Do3



**Read/Write Definition**

Slave ID: 1

Function: 01 Read Coils (0x)

Address: 1 Protocol address. E.g. 11 -> 10

Quantity: 4

Scan Rate: 1000 [ms]

Disable

☐ Read/Write Disabled

☐ Disable on error

View

Rows

☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ Fit to Quantity

☐ Hide Alias Columns ☒ PLC Addresses (Base 1)

☐ Address in Cell ☐ Enron/Daniel Mode

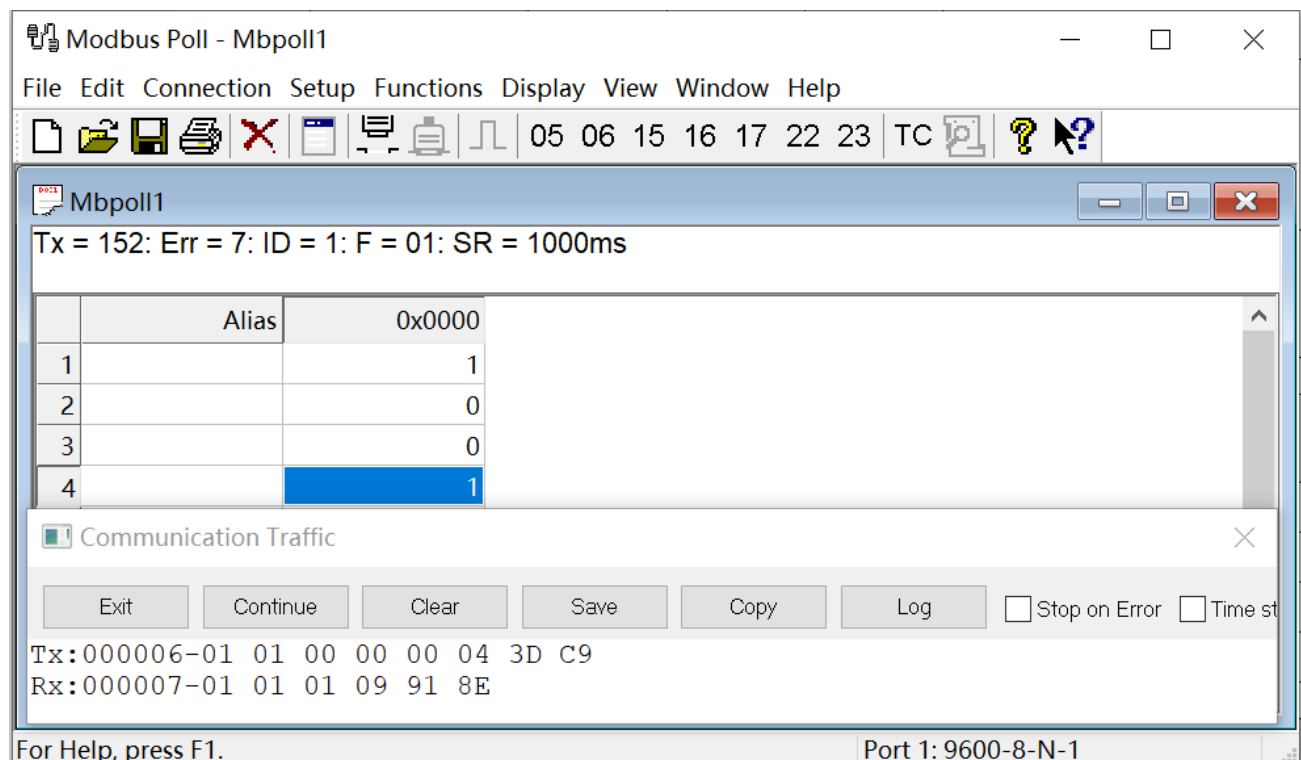
Buttons: OK, Cancel, Apply, Read/Write Once

Background Table:

	Alias	0x0000
1		1
2		0
3		0
4		1
5		
6		
7		
8		
9		

Tx = 31: Err = 7: ID = 1: F = 01: SR = 1000ms

For Help, press F1.



**Communication Traffic**

Buttons: Exit, Continue, Clear, Save, Copy, Log, ☐ Stop on Error, ☐ Time st

Tx: 000006-01 01 00 00 00 04 3D C9

Rx: 000007-01 01 01 09 91 8E

Background Table:

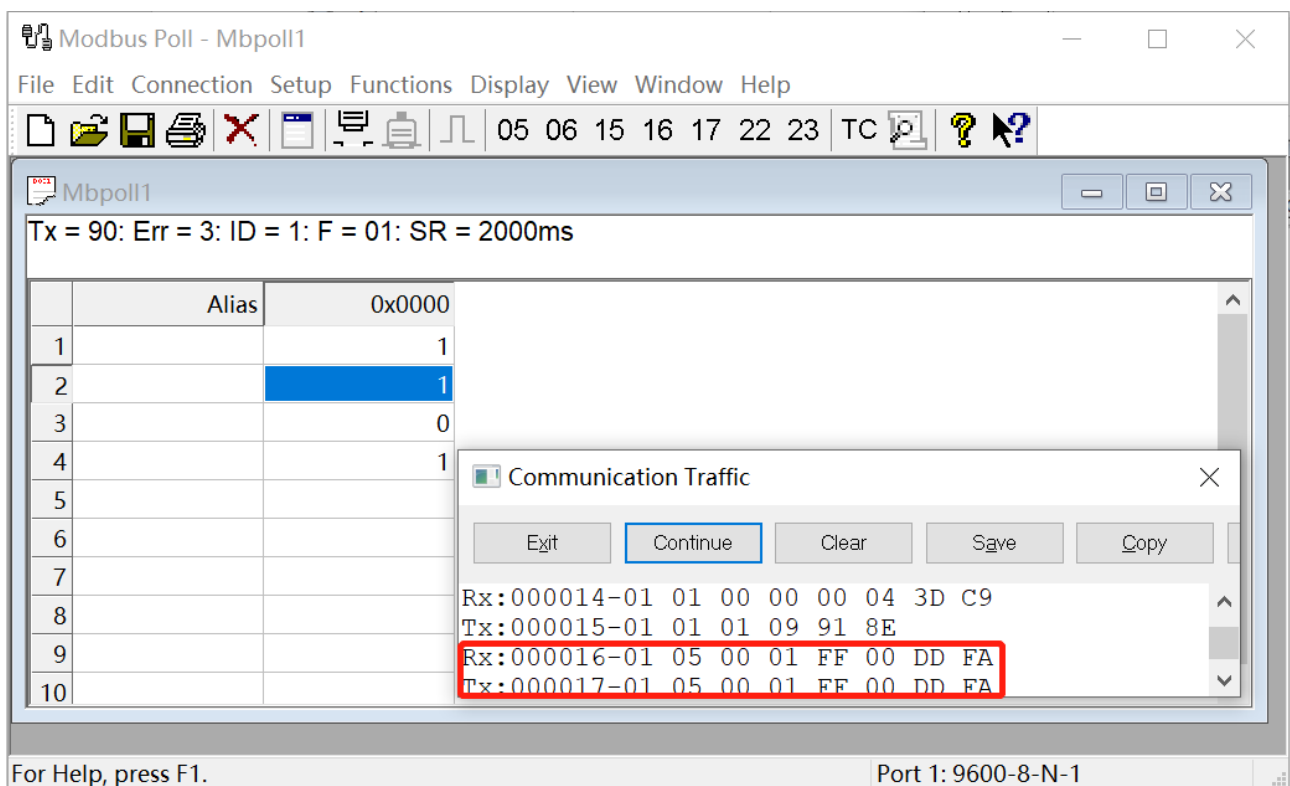
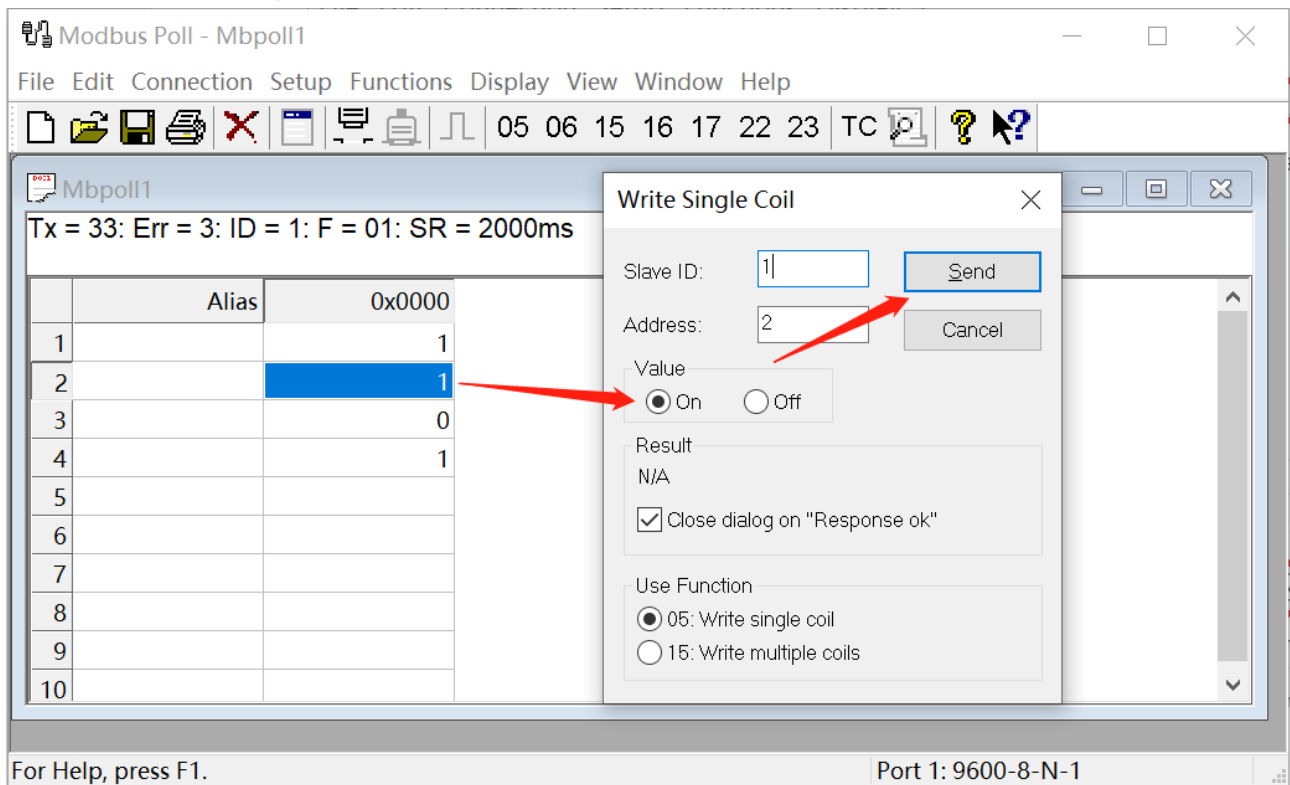
	Alias	0x0000
1		1
2		0
3		0
4		1
5		
6		
7		
8		
9		

Tx = 152: Err = 7: ID = 1: F = 01: SR = 1000ms

Port 1: 9600-8-N-1

For Help, press F1.

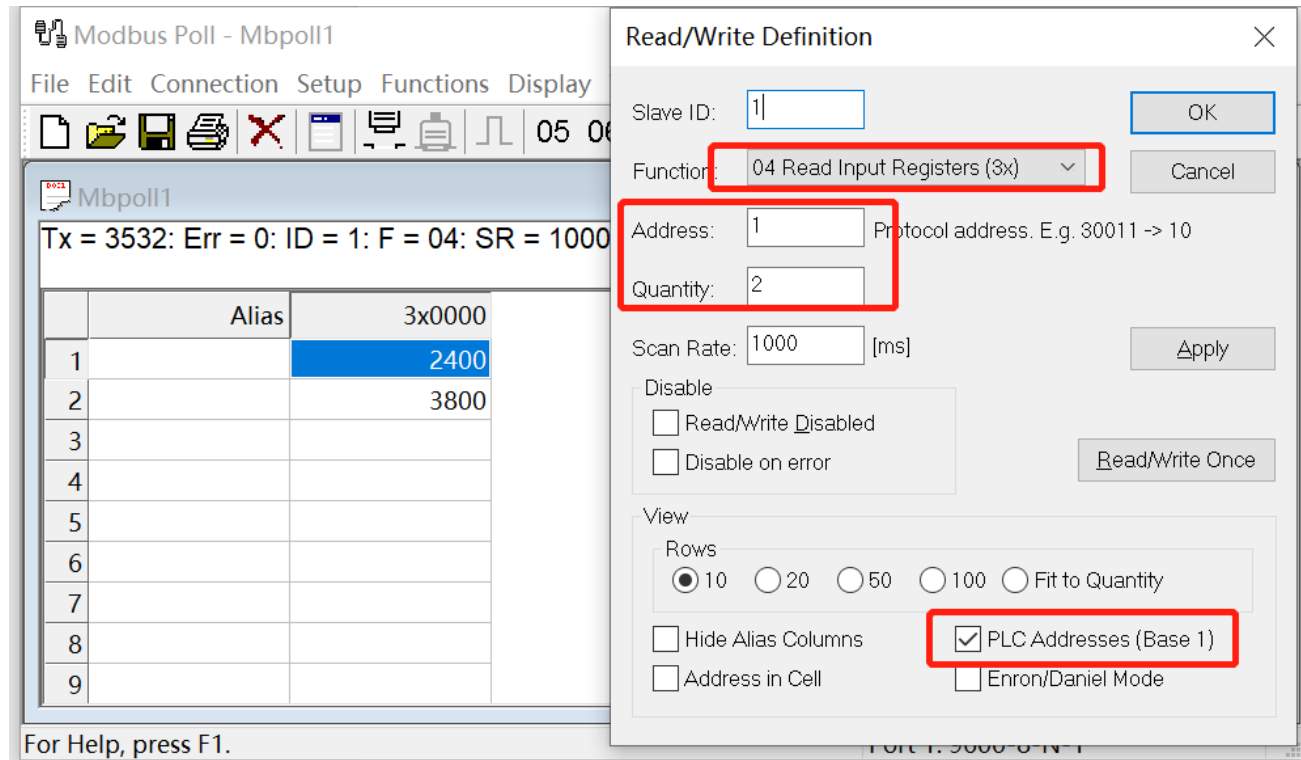
For example, write any Do1



## 5. Read analog input

Ai start address is 30001

For example, read Ai0-Ai1



**Read/Write Definition**

Slave ID: 1

Function: 04 Read Input Registers (3x)

Address: 1

Quantity: 2

Scan Rate: 1000 [ms]

Disable

☐ Read/Write Disabled

☐ Disable on error

View

Rows

☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ Fit to Quantity

☐ Hide Alias Columns

☒ PLC Addresses (Base 1)

☐ Address in Cell

☐ Enron/Daniel Mode

Buttons: OK, Cancel, Apply, Read/Write Once

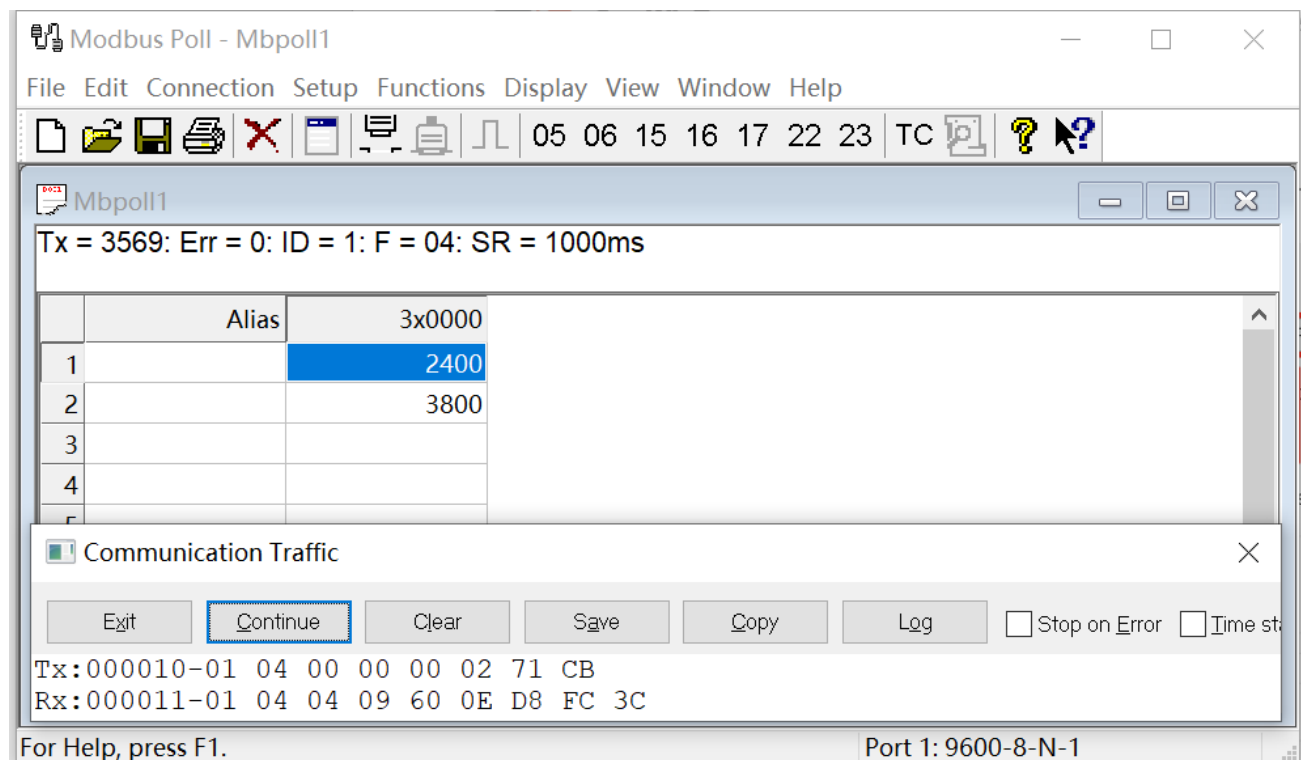
Background window: Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display

Tx = 3532: Err = 0: ID = 1: F = 04: SR = 1000

	Alias	3x0000
1		2400
2		3800
3		
4		
5		
6		
7		
8		
9		

For Help, press F1.



**Communication Traffic**

Buttons: Exit, Continue, Clear, Save, Copy, Log

☐ Stop on Error ☐ Time st

Tx: 000010-01 04 00 00 02 71 CB

Rx: 000011-01 04 04 09 60 0E D8 FC 3C

Background window: Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

05 06 15 16 17 22 23 TC ? ?

Tx = 3569: Err = 0: ID = 1: F = 04: SR = 1000ms

	Alias	3x0000
1		2400
2		3800
3		
4		
5		

For Help, press F1.

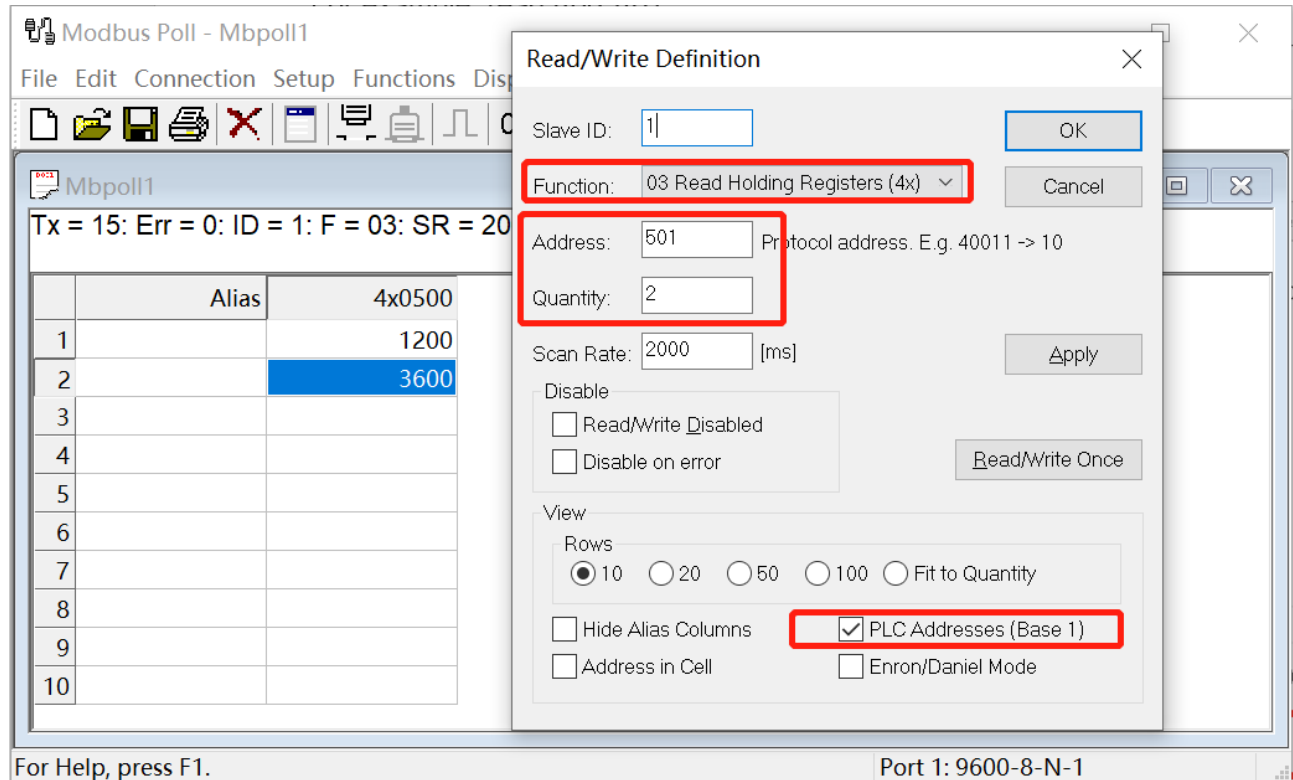
Port 1: 9600-8-N-1



## 6. Read and write analog output

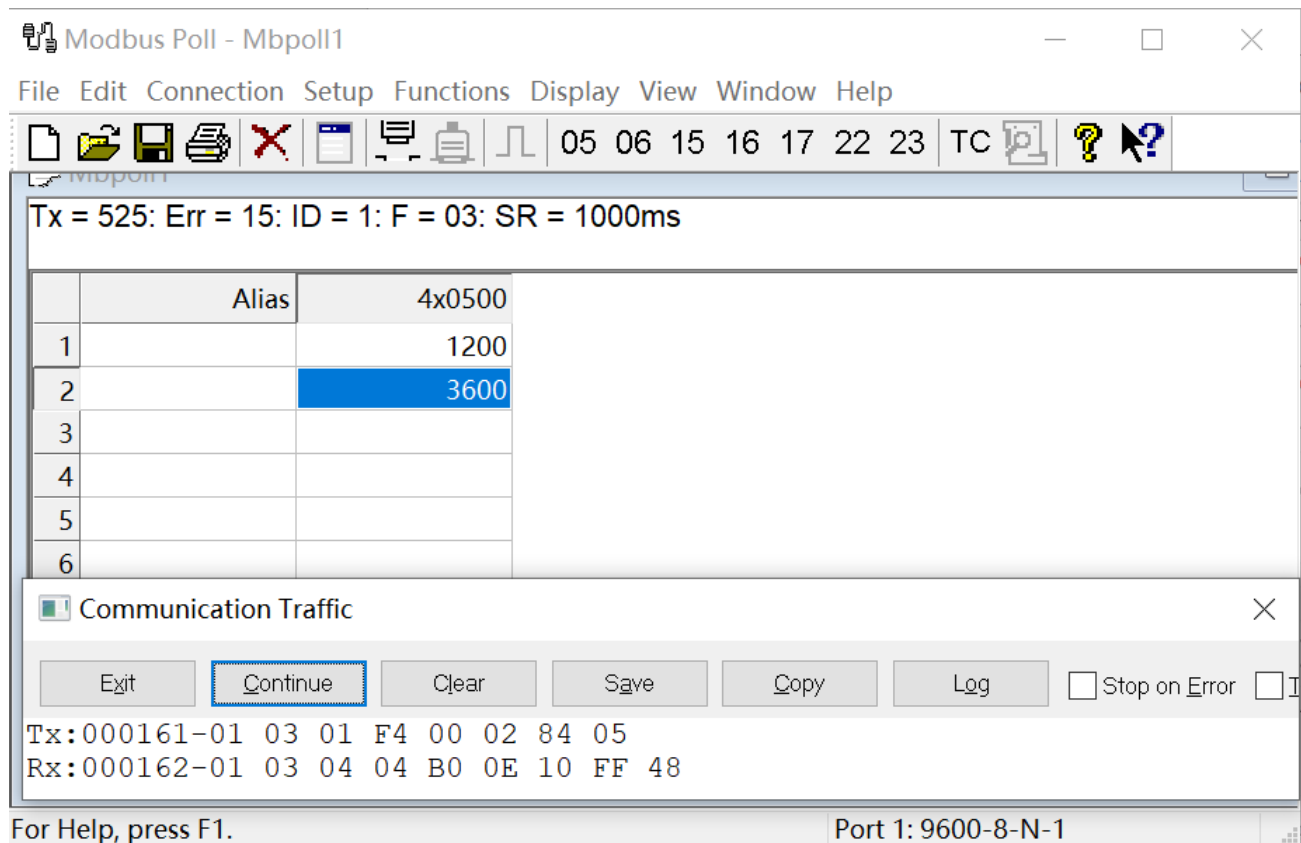
Ao start address is 40501

For example, read Ao0-Ao1



The screenshot shows the Modbus Poll - Mbpoll1 window. The 'Read/Write Definition' dialog box is open, showing the configuration for reading analog output. The 'Function' is set to '03 Read Holding Registers (4x)'. The 'Address' is set to '501' and the 'Quantity' is set to '2'. The 'Scan Rate' is set to '2000' [ms]. The 'View' section shows 'Rows' set to '10' and 'PLC Addresses (Base 1)' checked. The 'Alias' column in the main table is set to '4x0500'. The 'Status' bar shows 'Tx = 15: Err = 0: ID = 1: F = 03: SR = 20' and 'Port 1: 9600-8-N-1'.

	Alias	4x0500
1		1200
2		3600
3		
4		
5		
6		
7		
8		
9		
10		



The screenshot shows the Modbus Poll - Mbpoll1 window after a successful read operation. The 'Status' bar shows 'Tx = 525: Err = 15: ID = 1: F = 03: SR = 1000ms'. The 'Alias' column in the main table is set to '4x0500'. The 'Communication Traffic' window is open, showing the raw data for the transaction. The 'Continue' button is highlighted. The 'Status' bar shows 'Port 1: 9600-8-N-1'.

	Alias	4x0500
1		1200
2		3600
3		
4		
5		
6		

Communication Traffic

Exit Continue Clear Save Copy Log Stop on Error

Tx:000161-01 03 01 F4 00 02 84 05  
 Rx:000162-01 03 04 04 B0 0E 10 FF 48

## Write Ao0

Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

05 06 15 16 17 22 23 TC ? ?

Mbpoll1

Tx = 67: Err = 0: ID = 1: F = 03: SR = 2000r

	Alias	4x0500
1		2400
2		3600
3		
4		
5		
6		
7		
8		
9		
10		

**Write Single Register**

Slave ID: 1

Address: 501

Value: 2400

Result: N/A

☒ Close dialog on "Response ok"

Use Function

☒ 06: Write single register

☐ 16: Write multiple registers

Send

Cancel

For Help, press F1.

Port 1: 9600-8-N-1

Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

05 06 15 16 17 22 23 TC ? ?

Mbpoll1

Tx = 101: Err = 0: ID = 1: F = 03: SR = 2000ms

	Alias	4x0500
1		2400
2		3600
3		
4		
5		
6		
7		
8		
9		
10		

**Communication Traffic**

Exit Continue Clear Save Copy Log ☐ Time stamp

Rx: 000028-01 03 01 F4 00 02 84 05

Tx: 000029-01 03 04 04 B0 0E 10 FF 48

Rx: 000030-01 06 01 F4 09 60 CF BC

Tx: 000031-01 06 01 F4 09 60 CF BC

For Help, press F1.

Port 1: 9600-8-N-1