



MODBUS TCP/IP



Website: <http://www.we-con.com.cn/en>

Technical Support: weikt@we-con.com.cn

Skype:live:..cid.46484c120673d9ed

Phone: 86-591-87868869 EXT 886



1. General

V-BOX and HMI support MODBUS TCP/IP protocol.

Modbus TCP Slave(All function):this protocol means V-BOX as master

Modbus TCP Master:this protocol means V_BOX as slave

Modbus ASCII TCP is same rule with Modbus TCP

2. Parameter Settings

First demo shows V-BOX as master communicate with HMI as slave.

2.1 Operation Procedure (V-BOX as Master)

- 1) Click [Configuration] in menu;
- 2) Click [Communication],and add one new communication;
- 3) Select[Ethernet]-->[Modbus] -->[Modbus TCP Slave(All function)].This protocol means V-BOX as

master;

4) Set a IP address(slave IP): for example 192.168.1.20

1 Port: Ethernet

2 Device Type: ModBus

3 Protocol: ModBus TCP Sl...

Device Station No.: 1

Receive Timeout: 50 ms

Retry Timeout: 0 ms

Enable Broadcast: OFF

4 IP Address: 192.168.1.20

V-BOX Station No.: 0

Retry Count: 2

Wait Timeout: 1500 ms

Length: 0

Delay Time: 0 ms

Network type: tcp_client_2n

Port: 502

Broadcast Station No.: 0

Close Save

5) Set V-BOX IP in network configuration. For example 192.168.1.10

Note: if V-BOX connect with internet by static IP. This static IP must set a DNS. Different country has different DNS.

Network configuration | Operation remain

Server: Europe

Enable Ethernet

DHCP Use a static IP address

IP address: 192.168.1.10

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1

Preferred DNS server: Enter DNS server

Alternate DNS server: Enter DNS server

Enable WIFI

Enable 4G

box access password: *****

box connect service with: Ethernet

Cancel Upload configuration Download configuration

2.2 Operation Procedure (HMI as Slave)

- 1) Click [Communication] in menu and add a new protocol “Modbus TCP Master”

Communication

Connection:

No.	Commu...	Protocol	Device type
1	Ethernet		ModBus TCP Master

New Delete Setting

Station No.
HMI No.: 0 Device No.: 0

COM: Ethernet

Protocol: ModBus TCP Master

HMI Model: PI3070

COM: None Setting

Device IP: 192.168.1.201:502 Setting

Timeout: (1500, 50, 2, 3, 0, 0, 5) Setting

Change communication parameters

User-Defined protocol OK

- 2) Select[Project]-->[HMI IP]:192.168.1.20

Project Settings

Project Settings HMI IP Instalment Extend

HMI IP

IP: 192 . 168 . 1 . 20

Sub mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

Remote access password
password: 888888

Server of HMI remote access
Server address: Server 2

确定 取消 帮助

Second demo shows V-BOX as slave communicate with HMI as master.

2.3 Operation Procedure (HMI as Master)

- 1) Click [communication] and add a new protocol “Modbus TCP Slave(All function);
- 2) Set a slave IP:192.168.1.20

Communication

Connection:

No.	Commu...	Protocol	Device type
1	Ethernet		ModBus TCP Slave(All Fucti...

New Delete Setting

Station No.
HMI No.: 0 Device No.: 1

COM: Ethernet

Protocol: ModBus TCP Slave(All Fuction)

HMI Model: PI3070

COM: None Setting

Device IP: 192.168.1.20:502 Setting

Timeout: (1500, 50, 2, 3, 0, 0.5) Setting

Change communication parameters

User-Defined protocol OK

- 3) Set HMI IP:192.168.1.10

Project Settings

Project Settings HMI IP Instalment Extend

HMI IP

IP: 192 . 168 . 1 . 10

Sub mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

Remote access password
password: 888888

Server of HMI remote access
Server address: Server 2

2.4 Operation Procedure (V-BOX as Slave)

- 1) Click [Configuration] in menu;
- 2) Click [Communication],and add one new communication;
- 3) Select[Ethernet]-->[Modbus] -->[Modbus TCP Master].This protocol means V-BOX as slave;

- 4) Select[Ethernet]-->[Modbus] -->[Modbus TCP Master].This protocol means V-BOX as slave;
- 5) Set V-BOX IP in network configuration.For example 192.168.1.20