

CYT-133SC

User Manual



Document Version 1.0

Web Version 1.2 2011-03-07

Firmware Version 1.02.00, Mar 8 2011

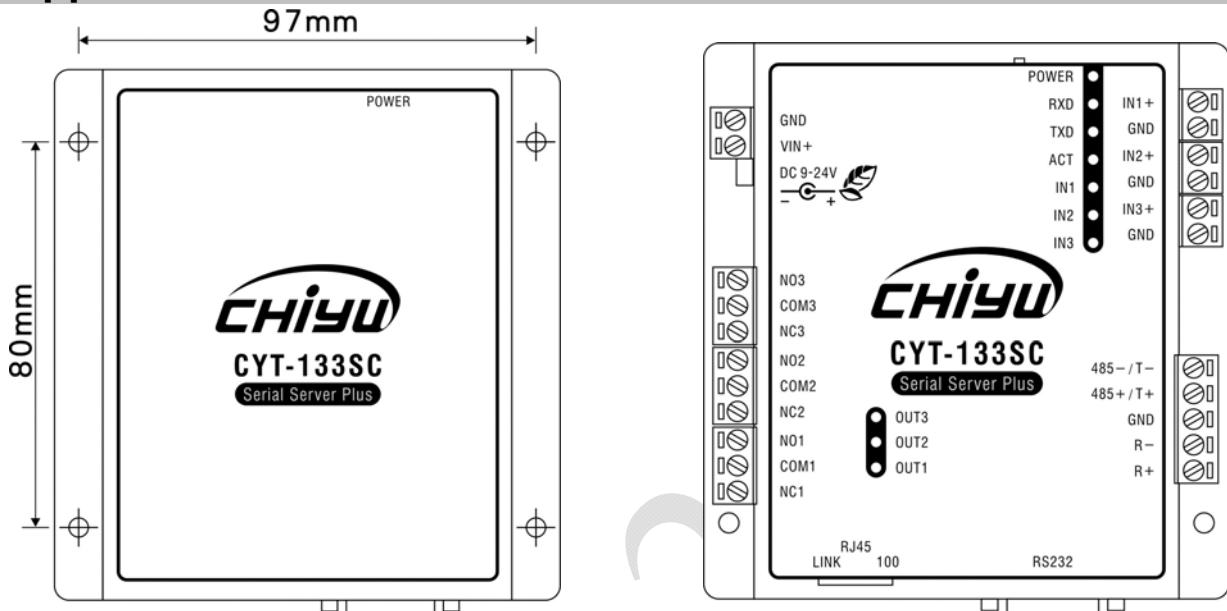
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— CYT-133SC —

I 、 Hardware Introduction

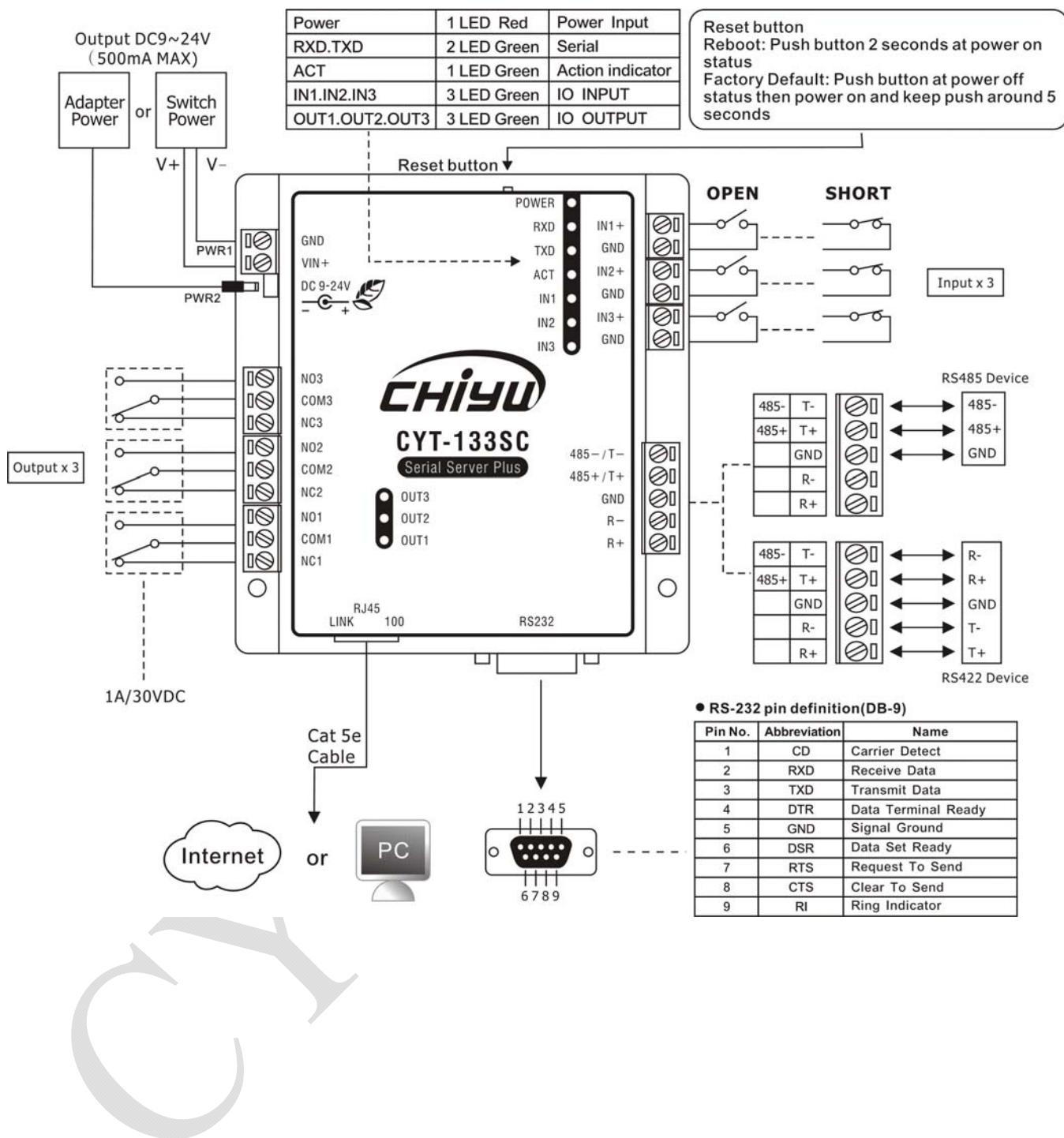
◆ Appearance



◆ Specification

Item	Specification
CPU	16 Bits, 100MHZ
Memory	256KB Flash & 2MB SDRAM
Watchdog	System never halt
Ethernet	10/100 Base-T/Tx/, Automatic MSI/MDI-x port
Communication Port	RS232, RS 422, RS 485
Connectors	DB9(MALE)/RJ-45
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND (1200M for the longest distance)
RS-485	Data+, Data-, GND (1200M for the longest distance)
I/O Control	3 Input (short) , 3 Output – Relay Mode (Maximum Voltage DC30V,1A)
Power Input	Choose one : PWR1: DC9~24V(500MA MAX) 2-pin Separate terminal PWR2: DC9~24V(500MA MAX) DC power to DC socket
Operating Temperature	0°C ~ 55°C
Operating Humidity	5 ~ 95%RH
Storage Temperature	-20°C ~ 85°C
Surge Protection	Serial port 15KV ESD
Electromagnetic protection	Ethernet port 1.5KV
LED Indicator	Power / RXD / TXD / ACT / IN1 / IN2 / IN3 / OUT1 / OUT2 / OUT3
Weight	340g
Dimensions (L x W x H)	106.5(86.5 without ear loop)*115(110 without RS232)*28 mm

◆ End point



II 、Product Overview

CYT-133SC is a RS232/RS485/RS422 converter for the integration of system and Ethernet management, designed and applied to enable traditional industrial serial devices to access data and control devices through Ethernet (intranet or internet)

Real time operation system and complete TCP/IP protocol enable CHIYU's CYT-133SC powerful converter not only providing complete system with highly efficiency but also able to link with network. Easy to install and wire. The Web interface of CYT-133SC is simple, easily to operate, and without operation system limitation.

Beside of signal conversion function, CYT-133SC also provides 3 sets of DI and DO to reach the DIO remote control function.

◆ Features

- CYT-133SC support 5 kinds of connection: TCP server, TCP client ,UDP , Real com and Extend I/O ,Users can select suitable connecting way
- Support DHCP Client, when activate this function, CYT-133SC can get TCP/IP default from DHCP Server when the system activates, Includes IP address, default getaway IP and DNS server.
- Support PPPoE, PPPoE is an internet protocol for the link simulation of dial-up connection and remote host.
- Support Dynamic DNS, this enable CYT-133SC connect with dynamic IP by fixed Domain Name, enable hosts situated in different location to get access to CYT-133SC through internet.
- Auto detecting 10/100 M Ethernet.
- Enable users to conduct data access or management on CYT-133SC through various operation system of IE , Netscape browser.
- Allows users to back up and store file system parameter and restore it, for security reasons the backup file will be stored encrypted.
- The CYT-133SC supports 3 DI/3 DO totally; 3 DI with any combination rule can trigger each DO. By providing a smart and easily setup way via Web, user doesn't need to have any programmer background.
- CYT-133SCsupport I/O expansion and can expend to 30 sets of DIO with additional BF-51(DIO BOX).
- Support Heart Beat function. When CYT-133SC set the Serial Server Mode Setup into UDP, the Heart Beat function will be enabled. Every 30 seconds will send a UDP to server to prove the connection is still enabled.
- Support Peer to Peer function: Add Peer To Peer function to make the data connection between CYT-133SC.
- With SMTP client support, you can set system to trigger alarm message via e-mail or SMS (Short Message System) to your mobile phone.
- Support remote reset command (Command & CGI) and I/O Control CGI command.

III、WEB Login

CYT-133SC contains a HTTP server, thus CYT-133SC can link and connect through Web browser, and then conduct setting.

◆ Preparation

Before conducting CYT-133SC setting, please assure the following:

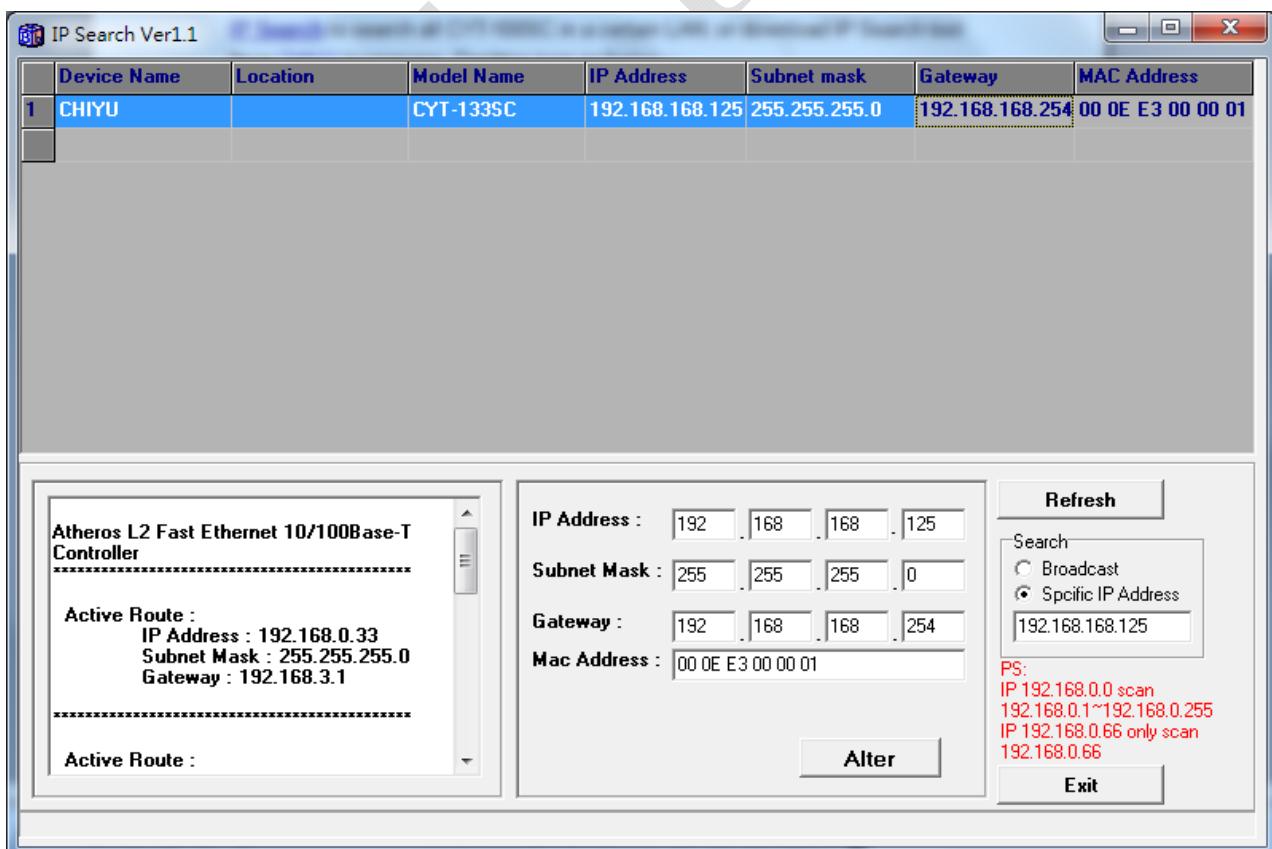
- PC has connected to CYT-133SC, and PC and CYT-133SC are situated in the same WAN with power supplied.
- If the default IP address (192.168.168.125) is occupied by else device, then it is a must to shut down that device first till the setting is over, and then allocate new IP address to CYT-133SC.

◆ How to search CYT-133SC

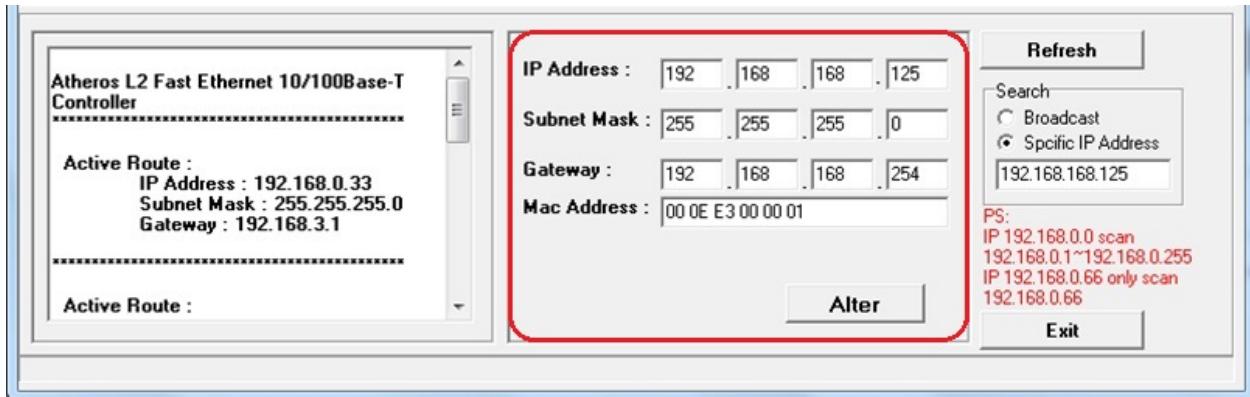
1、After installation of CYT-133SC and network cable is completed, use CYT-133SC's [IP Search](#) to search all CYT-100SC in a certain LAN, or download IP Search tool from [CHIYU](#) homepage. Desktop icon as below:



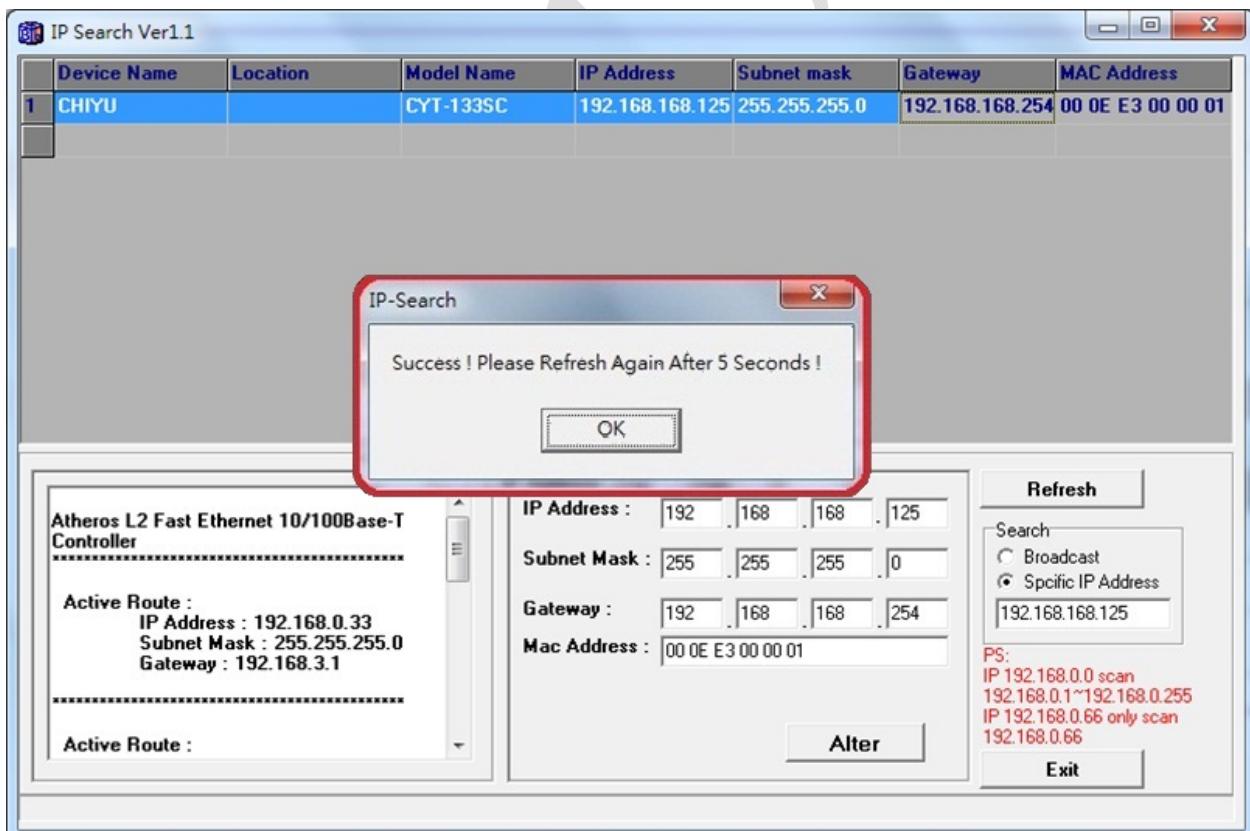
2、Click IP Search icon, will display a window, as shown:



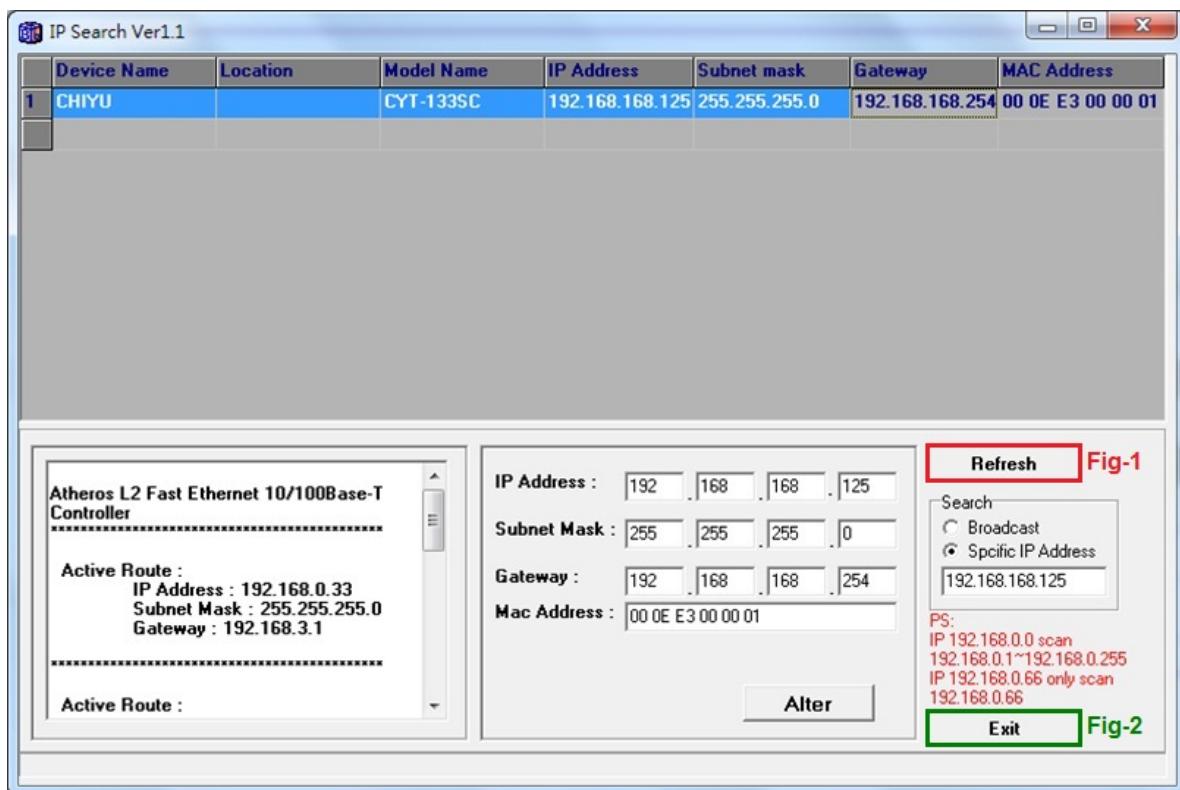
- 3、While the IP Search window shows up, it will display all CYT-133SC in LAN, and show its **Device name**, **Location**, **Model Name**, **IP Address**, **Subnet Mask**, **Gateway**, **Mac Address**. Select particular CYT-133SC, then its related information will appear below the window, as shown:



- 4、The showed information of CYT-133SC can be revised directly in the window, the part can be modified: IP Address, Subnet Mask, Gateway. After modification completed (**MAC Address can not modify**),click **Alter** then it will display the modified information, as shown:



- 5、After modification, if want to confirm whether the modification is correct or not, click Refresh button to refresh and check information (Fig-1), click Exit button to leave.(Fig-2)



- 6、After modification, the IP address of CYT-133SC has matched with its WAN, if want to get access into the Web of CYT-133SC, has two methods:

- (1)Open IP Search, select and double click particular CTY-133SC, then to enter its webpage.
- (2)While the internet explorer opened, input CYT-133SC IP address to enter its webpage

Remark :

WINDOWS XP :

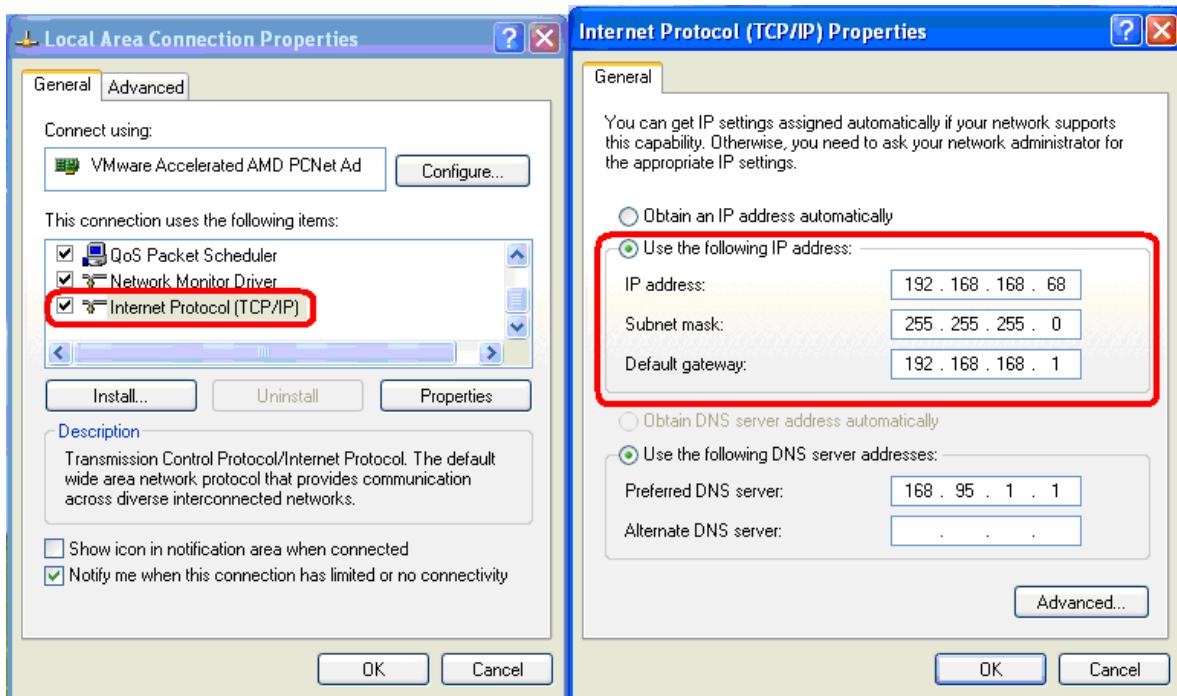
《Step 1》



Click WINDOWS XP my computer , Open Control Pan Control Panel on the left side, please turn to traditional overview and select network link

《Step 2》

Click LAN, then select content, the link configuration will be shown, click Internet Protocol (TCP/IP) then input the same setting as CYT-133SC, as below figure:



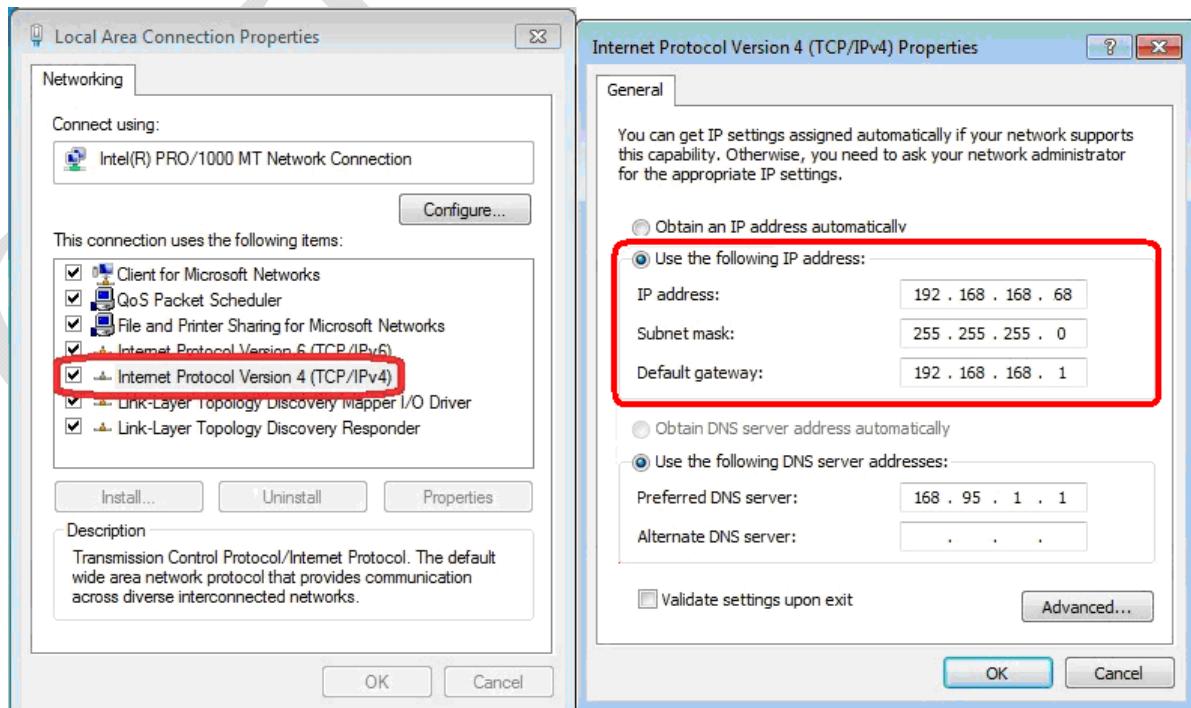
WINDOWS 7 :

《Step 1》

Click Windows 7 icon, select Control Panel, open and search for , Network and Sharing Center click Alter Interface Card on the upper-left side.

《Step 2》

Click LAN link, select content, then the LAN settings will be shown, click Internet Protocol(TCP/IPv4), click and input same setting as CYT-133SC, as below figure.

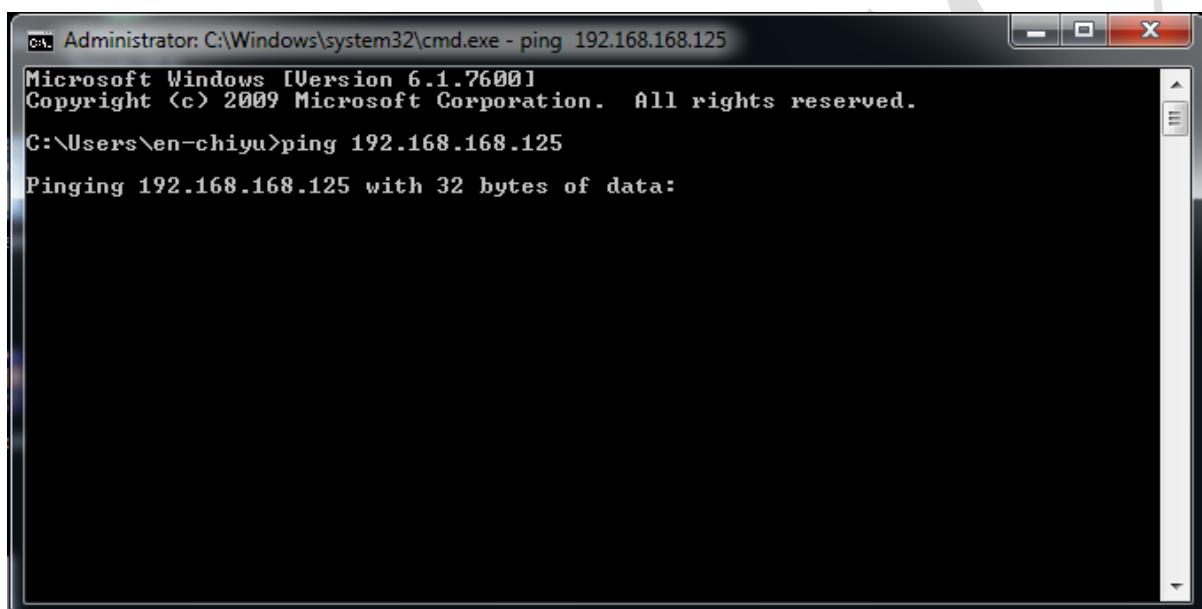


◆ How to login to CYT-133SC Web via web browser

1、Start Web browser (eg: WIN 7 IE), input CYT-133SC's IP Address, for example: use the default CYT-133SC IP Address: <http://192.168.168.125>

2、If connection failed, should check:

- If CYT-133SC installed and its power supplied properly
- To examine the LAN connection, can use start tools→Execute→Input cmd open MS-DOS, Input “ ping” to test CYT-133SC connection, input command: ping 192.168.168.125, as shown below:



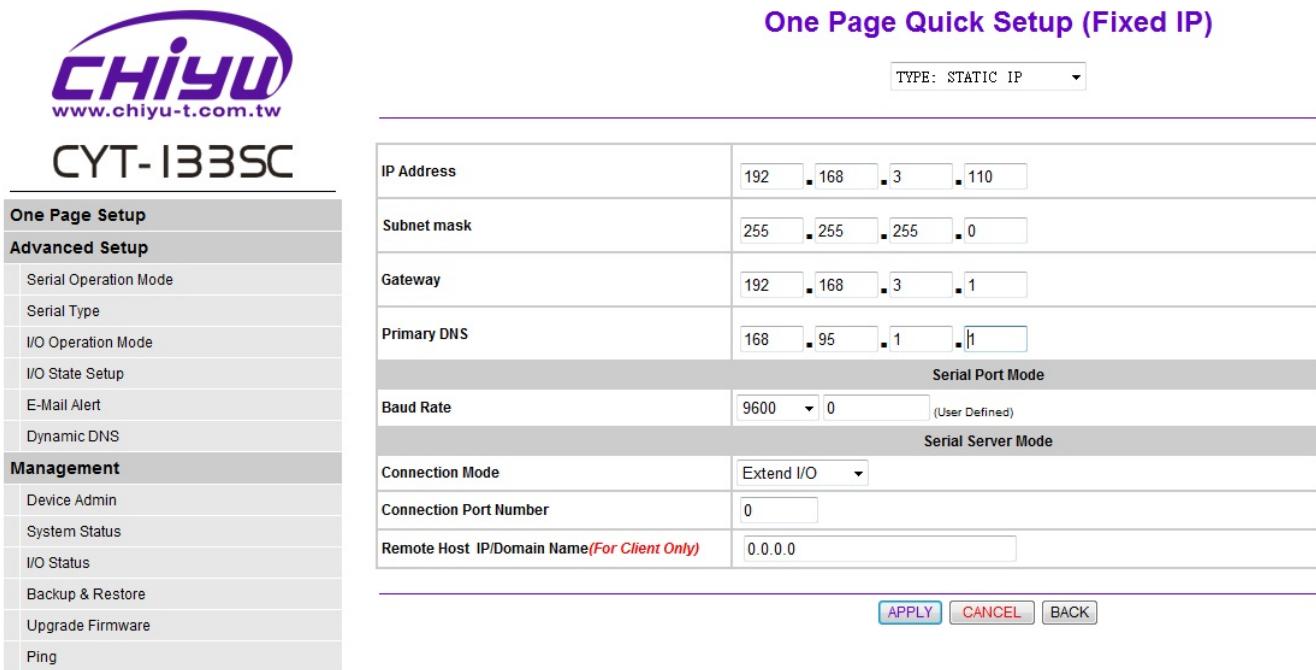
A screenshot of a Windows Command Prompt window titled "Administrator: C:\Windows\system32\cmd.exe - ping 192.168.168.125". The window shows the following text:
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\en-chiyu>ping 192.168.168.125
Pinging 192.168.168.125 with 32 bytes of data:

- If no response received, it explains the link has troubles either the connection is not proper or the PC's IP address can not match with CYT-133SC's IP address
- Set the PC's IP address with CYT-133SC's IP address with same segment, if the PC uses fixed IP address, the address must be ranged in: 192.168.168.1 ~ 192.168.168.65 or 192.168.168.67 ~ 192.168.168.254 , thus it can be compatible with CYT-133SC's default IP address: 192.168.168.125, the **Subnet Mask**'s setting must be: 255.255.255.0 , [please refer to page 6 ~ 7](#)

3、If the connection with CYT-133SC is successful, then it will display a message window for User name and Password, the default for user name and Password is: [admin/admin](#), as shown below:



4、While the user name and password entered, a Web setting interface of CTY-133SC will be showed, enter it will then display a “ [One Page Quick Setup](#) ” page.



The screenshot shows the CHIYU CYT-133SC web configuration interface. On the left, a sidebar lists navigation options: One Page Setup, Advanced Setup, Management, and various status and control links. The main area is titled "One Page Quick Setup (Fixed IP)". A dropdown menu "TYPE: STATIC IP" is set to "STATIC IP". The configuration form includes fields for IP Address (192.168.3.110), Subnet mask (255.255.255.0), Gateway (192.168.3.1), Primary DNS (168.95.1.1), Baud Rate (9600), Connection Mode (Extend I/O), Connection Port Number (0), and Remote Host IP/Domain Name (For Client Only) (0.0.0.0). Buttons for APPLY, CANCEL, and BACK are at the bottom.

IV、Web Function Instruction

◆ One Page Quick Setup



CYT-133SC

One Page Setup

Advanced Setup

Serial Operation Mode

Serial Type

I/O Operation Mode

I/O State Setup

E-Mail Alert

Dynamic DNS

Management

Device Admin

System Status

I/O Status

Backup & Restore

Upgrade Firmware

Ping

One Page Quick Setup (Fixed IP)

TYPE: STATIC IP

IP Address	192 . 168 . 3 . 110
Subnet mask	255 . 255 . 255 . 0
Gateway	192 . 168 . 3 . 1
Primary DNS	168 . 95 . 1 . 1
Serial Port Mode	
Baud Rate	9600 ▾ 0 (User Defined)
Serial Server Mode	
Connection Mode	Extend I/O
Connection Port Number	0
Remote Host IP/Domain Name <i>(For Client Only)</i>	0.0.0.0

APPLY **CANCEL** **BACK**

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● Function instruction of STATIC IP

Function	Description
IP Address	Set the IP address of the CYT-133SC , default setting is 192.168.168.125
Subnet mask	Set the subnet mask of the CYT-133SC , default setting is 255.255.255.0
Gateway	Set the gateway of the CYT-133SC , default setting is 192.168.168.254
Primary DNS	Set the DNS of the CYT-133SC , default setting is 168.95.1.1
Serial Port Mode	
Baud Rate	1. Set serial port baud rate, the parameters can be selected : 1200 、 2400 、 4800 、 9600 、 19200 、 38400 、 57600 、 115200 、 230400 and Others 2. After selecting Others , fill custom baud rate into the user defined 3. Default setting is 19200
Serial Server Mode	
Connection Mode	There are 5 modes to set into connection mode, such as : <ul style="list-style-type: none"> ● Real Com ● TCP SERVER ● TCP CLIENT ● UDP ● Extend I/O(no data conversion)
Connection Port Number	Set CYT-133SC connection port number, default setting is 50000
Remote Host IP Address	1. Set the remote host IP or domain name , default setting is 0.0.0.0 2. For Client Only


CYT-133SC

One Page Setup	
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I/O Operation Mode	
I/O State Setup	
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Backup & Restore	
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Ping	

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One Page Quick Setup (DHCP Client)

TYPE: DHCP CLIENT

Host Name (optional)	CHIYU	Serial Port Mode	
Baud Rate	19200	0	(User Defined)
Connection Mode	TCP SERVER		
Connection Port Number	0		
Remote Host IP/Domain Name <i>(For Client Only)</i>	0.0.0.0		

APPLY CANCEL BACK

● Function instruction of DHCP CLIENT

Function	Description
Host Name (optional)	Fill in the host name , default setting is CHIYU (optional)
Serial Port Mode	
Baud Rate	<p>1. Set serial port baud rate, the parameters can be selected : 1200、2400、4800、9600、19200、38400、57600、115200、230400 and Others</p> <p>2. After selecting Others , fill custom baud rate into the user defined</p> <p>3. Default setting is 19200</p>
Serial Server Mode	
Connection Mode	<p>There are 5 modes to set into connection mode, such as :</p> <ul style="list-style-type: none"> ● Real Com ● TCP SERVER ● TCP CLIENT ● UDP ● Extend I/O(no data conversion)
Connection Port Number	Set CYT-133SC connection port number, default setting is 50000
Remote Host IP Address	<p>1. Set the remote host IP or domain name , default setting is 0.0.0.0</p> <p>2. For Client Only</p>


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One Page Quick Setup (PPPoE)

TYPE: PPPoE

User Name	(1 - 47)
Password	(1 - 35)
Service Name (optional)	(1 - 47)
Close Connection when Idle Time Over	0 (seconds)
PPPoE with Fixed IP Address	DISABLE
Serial Port Mode	
Baud Rate	9600 0 (User Defined)
Serial Server Mode	
Connection Mode	TCP SERVER
Connection Port Number	0
Remote Host IP/Domain Name <i>(For Client Only)</i>	0.0.0.0

APPLY **CANCEL** **BACK**

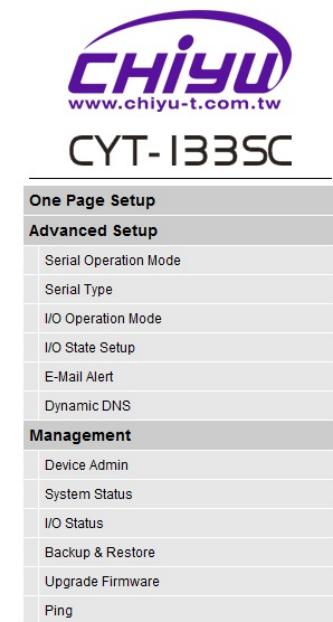
● Function instruction of PPPoE

Function	Description
User Name	Fill in the user name, up to 47 characters
Password	Fill in the password, up to 35 characters
Service Name (optional)	Fill in the service name (optional), up to 47 characters
Close Connection when Idle Time Over	<ul style="list-style-type: none"> Default setting is 0 second, the range is from 0 ~ 4294967295 Keep the connection of CYT-133SC and ISP always must set the no into 0 or the connection with PPPoE will be disabled when Idle time over.
PPPoE with Fixed IP Address	<ul style="list-style-type: none"> After selecting ENABLE, fill in fixed IP Default setting is DISABLE optional
Serial Port Mode	
Baud Rate	1. Set serial port baud rate, the parameters can be set : 1200 、 2400 、 4800 、 9600 、 19200 、 38400 、 57600 、 115200 、 230400 及 Others 2. After selecting Others , fill custom baud rate into the user defined 3. Default setting is 19200
Serial Server Mode	
Connection Mode	There are 5 modes to set into connection mode, such as : <ul style="list-style-type: none"> Real Com TCP SERVER TCP CLIENT UDP Extend I/O(no data conversion)
Connection Port Number	Set CYT-133SC connection port number, default setting is 50000
Remote Host IP Address	1. Set the remote host IP or domain name , default setting is 0.0.0.0 2. For Client Only

◆ Advanced Setup

1、Serial Operation Mode Setup

(1)TCP Server



Serial Server Mode Setup (TCP Server)

MODE: TCP SERVER ▾

Local Listen Port Number	<input type="text" value="0"/>
Close Connection When Remote Idle	<input type="text" value="100"/> (seconds)
Access Password	<input type="password"/> (maxlen 31)
Keep Alive Check	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Max TCP Connection	<input type="text" value="1"/>
Real COM	<input type="checkbox"/> ENABLE

● Function instruction

Function	Description
Local Listen Port Number	<ul style="list-style-type: none"> ● If data transmit thru TCP/IP remote command, must select Serial Server Mode into TCP SERVER and set LISTEN PORT NUMBER into the same value with monitoring side. ● Default setting is 50000
Close Connection When Remote Idle	<ul style="list-style-type: none"> ● The default setting of close connection time is 100 seconds and the range is from 0 ~ 32768 ● The value must set to be 0 if you want to keep CYT-133SC connect with monitoring side or the connection will be off automatically when remote idle.
Access Password	<ul style="list-style-type: none"> ● Make sure the data secure, user must set the code for management. User must inset the correct password and process the further procedure after authority. ● up to 31 characters
Keep Alive Check	<ul style="list-style-type: none"> ● Set Enable or Disable keep alive check function , default setting is Disable ● While keep alive check enable, the pin packet will be send to Gateway every 30 seconds to make cure the connection.
Max TCP Connection	The maximum TCP connection is 4 sets , default setting is 1
Real COM	When using the Virtual COM , if you need CYT-133SC with VCOM to send each other RTS / CTS, DTR / DSR signal, this option must be checked

(2) TCP Client



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Serial Server Mode Setup (TCP Client)

MODE: TCP CLIENT

Remote Connection Port Number	0 (0 - 65535)
Remote Host IP Address/Domain Name	0.0.0.0
TCP Connection	<input type="radio"/> Start Up <input checked="" type="radio"/> Any Character

APPLY **CANCEL** **BACK**

● Function instruction

Function	Description
Remote Connection Port Number	Set the remote connection port number , the range is 0 ~ 65535 , default setting is 50000
Remote Host IP Address	Set remote host IP address or domain name , default setting is 0.0.0.0
TCP Connection	<ul style="list-style-type: none"> ● There are 2 modes to set TCP connection to server : <p>1.Start Up : This mode means when CYT-133SC enable, it will build the TCP connection with SERVER immediately. It will automatically build the TCP connection after disable and then re-connect again.</p> <p>2.Any Character : This mode means only when CYT-133SC receives data from RS232/422/485, it will build TCP connection with SERVER. TCP connection will be disable if not receiving the data from RS232/422/485.</p>

(3)UDP

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CYT-133SC

One Page Setup

Advanced Setup

- Serial Operation Mode
- Serial Type
- I/O Operation Mode
- I/O State Setup
- E-Mail Alert
- Dynamic DNS

Management

- Device Admin
- System Status
- I/O Status
- Backup & Restore
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Serial Server Mode Setup (UDP)

MODE: UDP

Remote Connection Port Number	0 (0 - 65535)
Remote Host IP Address/Domain Name	0.0.0.0
Local Listen Port	50000 (0 - 65535)
Heart Beat	Disable per 30 (seconds,max 65535)

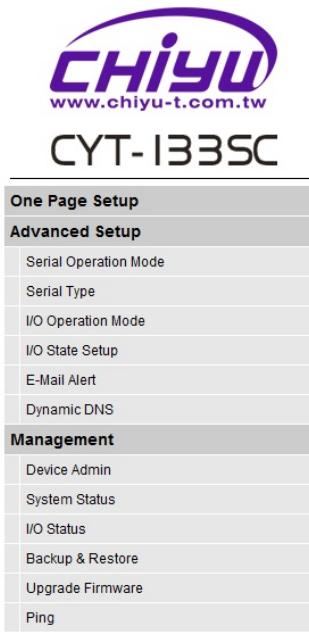
APPLY CANCEL BACK

● Function instruction

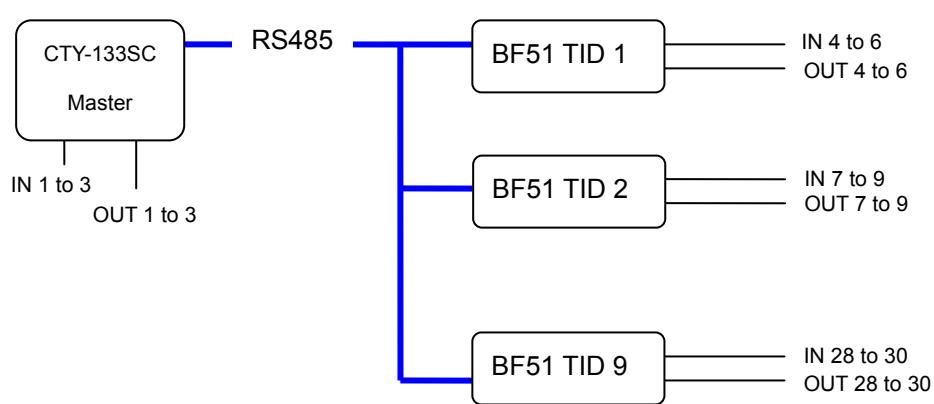
Function	Description
Remote Connection Port Number	Set the remote connection port number , the range is 0 ~ 65535 , default setting is 50000
Remote Host IP Address	Set remote host IP address or domain name , default setting is 0.0.0.0
Local Listen Port	Set the local listen port , default setting is 50000
Heart Beat	How many seconds to transmit a UDP heart beat to server can be selected. It's helpful to know the connection with SERVER enabled. Default setting is Disabled , and the maximum setting is 65535 seconds.

(4)Extend I/O

When set CYT-133SC into Extend I/O mode, it won't have the data conversion function. It can expend I/O by connect with BF-51.



Structure :



PS : BF-51 is the I/O box with 3 sets of DI / DO. TID set by DIP switch and maximum can connect with BF-51 * 9.

2、Serial Port Setup

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CYT-133SC

One Page Setup
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Serial Port Setup

Baud Rate	19200 <input type="button" value="▼"/> 0 <input type="text" value="User Defined"/>
Data Bits	8 <input type="button" value="▼"/>
Parity Check	None <input type="button" value="▼"/>
Stop Bits	1 <input type="button" value="▼"/>
Flow Control	None <input type="button" value="▼"/>
Force Packet Transmit Time	2 <input type="text" value="10ms unit"/>
Force Packet Transmit Length	1000 <input type="text" value="1 - 1500/bytes"/>
Delimiter 1	0x 00 <input type="text" value="HEX"/> <input type="radio"/> Enable <input checked="" type="radio"/> Disable
Delimiter 2	0x 00 <input type="text" value="HEX"/> <input type="radio"/> Enable <input checked="" type="radio"/> Disable

APPLY CANCEL BACK

● Function instruction

Function	Description
Baud Rate	<p>1. Set serial port baud rate, the parameters can be selected : 1200、2400、4800、9600、19200、38400、57600、115200、230400及Others</p> <p>2. After selecting Others , fill custom baud rate into the user defined</p> <p>3. Default setting is 19200</p>
Data Bits	Set the data bits , 5,6,7,8 parameters can be selected, default setting is 8
Parity Check	<ul style="list-style-type: none"> Set the parity check , 4 parameters can be selected : <ul style="list-style-type: none"> 1.odd 2.Even 3.Mark 4.Space Default setting is None
Stop Bits	Set the stop bits , 1,2 parameters can be selected, default setting is 1
Flow Control	<p>Set the flow control , 2 parameters can be selected :</p> <ul style="list-style-type: none"> Xon/Xoff : Software flow control CTS/RTS : Hardware flow control Default setting is None
Force Packet Transmit Time (10ms)	<ul style="list-style-type: none"> Force packet transmit time The minimum setting is 10ms of setting serial interval between data. Default setting is 20ms.
Force Packet Transmit Length (bytes)	<ul style="list-style-type: none"> Force packet transmit length. The serial set length of data transmission range is from 1 ~ 1500bytes. Default setting is 1000
Delimiter 1	<ul style="list-style-type: none"> Set the transmission data end by identified delimiter and if your transmission data includes the identified delimiter, CYT-133SC will send out packet at once. Default setting is disabled. The range is from 0x00 ~ 0xFF
Delimiter 2	<ul style="list-style-type: none"> Set the transmission data end by identified delimiter and if your transmission data includes the identified delimiter, CYT-133SC will send out packet at once. Default setting is disabled. The range is from 0x00 ~ 0xFF

3、I/O Operation Mode

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CYT-I33SC

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I/O Operation Mode Setup (Auto)

I/O Operation Mode: AUTO

I/O operation is controlled by itself Automatically, according to the setting in I/O State Setup

OUTPUT 1	Triggered Rule : IN 1 ▾ NONE ▾ NONE ▾ NONE ▾ NONE ▾
	Alarm Generation: <input checked="" type="radio"/> Enable <input type="radio"/> Disable
OUTPUT 2	Triggered Rule : IN 2 ▾ NONE ▾ NONE ▾ NONE ▾ NONE ▾
	Alarm Generation: <input checked="" type="radio"/> Enable <input type="radio"/> Disable
OUTPUT 3	Triggered Rule : IN 3 ▾ NONE ▾ NONE ▾ NONE ▾ NONE ▾
	Alarm Generation: <input checked="" type="radio"/> Enable <input type="radio"/> Disable
<i>note: The precedence of combination rule is from left to right, for example if selected rule is IN_1 or IN_3 and IN_2, then the rule will be activated as (IN_1 or IN_3) and IN_2</i>	

(1)Auto

This page provides smart I/O control. No need to have any programming background, only set the connection of each I/O via this page, and can make the linked connection of each I/O. For instance, there are 2 devices to connect with IN1 /IN2 and OUTPUT1. The trigger mode is IN1/IN2 trigger OUTPUT1 at the same time. The OUTPUT1 configuration is IN1 and IN2.

- Through alarm output setting, it can send alarm mail to user when OUTPUT 1~3 has been triggered.
- When select AUTO mode, command mode connection will be disabled.

● Function instruction

Function	Description
OUTPUT 1	<ul style="list-style-type: none"> ● Triggered Rule Set trigger OUTPUT 1 condition, use IN1~3 ,AND and OR these conditions to set. For instance: When IN1 、IN2 and IN3 enable at the same time, meanwhile OUTPUT1 will be triggered. The setting condition must be IN1 AND IN2 AND IN3. ● Alarm Generation Enable or disable alarm output function, the default setting is Enable. When OUTPUT1 has been triggered, alarm mail will send to user automatically.
OUTPUT 2	<ul style="list-style-type: none"> ● Triggered Rule Set trigger OUTPUT 2 condition, use IN1~3 ,AND and OR these conditions to set. For instance: When IN1 、IN2 and IN3 enable at the same time, meanwhile OUTPUT1 will be triggered. The setting condition must be IN1 AND IN2 AND IN3. ● Alarm Generation Enable or disable alarm output function, the default setting is Enable. When OUTPUT2 has been triggered, alarm mail will send to user automatically.
OUTPUT 3	<ul style="list-style-type: none"> ● Triggered Rule Set trigger OUTPUT 3 condition, use IN1~3 ,AND and OR these conditions to set. For instance: When IN1 、IN2 and IN3 enable at the same time, meanwhile OUTPUT1 will be triggered. The setting condition must be IN1 AND IN2 AND IN3. ● Alarm Generation Enable or disable alarm output function, the default setting is Enable. When OUTPUT3 has been triggered, alarm mail will send to user automatically.

(2) TCP Server



CYT-133SC

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[I/O Status](#)

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I/O Operation Mode Setup (TCP Server)

TCP SERVER ▾

Local Listen Port Number	50001
Close Connection When Remote Idle	10 (seconds)
Access Password	(maxlen 31)
Auto Report I/O Status	<input checked="" type="radio"/> Disable <input type="radio"/> State Changed <input type="radio"/> Periodically, for Every 0 seconds Through : ETH ▾

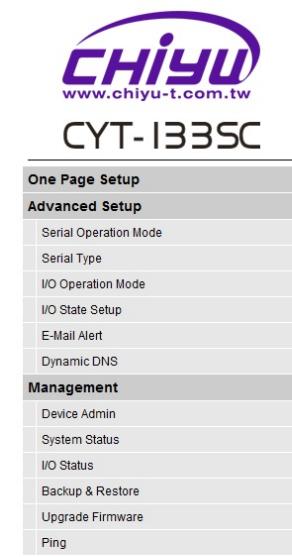
Web Version 1.2

2011-03-07

● Function instruction

Function	Description
Local Listen Port Number	<ul style="list-style-type: none"> ● Set local I/O port, the range is from 0 ~ 65535. ● Default setting is 50001
Close Connection When Remote Idle	<ul style="list-style-type: none"> ● The default setting of close connection time is 10 seconds and the range is from 0 ~ 32768 ● The value must set to be 0 if you want to keep CYT-133SC connect with monitoring side or the connection will be off automatically when remote idle.
Access Password	<ul style="list-style-type: none"> ● Make sure the data secure, user must set the code for management. User must inset the correct password and process the further procedure after authority. ● up to 31 characters
Auto Report I/O Status	<ul style="list-style-type: none"> ● Automatically return I/O status ● Disable : No automatically return I/O Status ● State Changed : I/O status will be returned automatically when INPUT changes. ● Periodically : Set I/O status return automatically every few seconds. ● Through : I/O status will be returned thru Serial and ETH.

(3)TCP Client



The screenshot shows the CHIYU CYT-133SC web interface. On the left is a sidebar with navigation links: One Page Setup, Advanced Setup, Management, and various status and configuration options like Serial Operation Mode, I/O Operation Mode, and E-Mail Alert. The main content area is titled "I/O Operation Mode Setup (TCP Client)". It includes fields for "Remote Connection Port Number" (set to 50001), "Remote Host IP Address" (set to 192.168.3.111), and "Auto Report I/O Status" (with options for Disable, State Changed, Periodically, and Through). Below these are "APPLY", "CANCEL", and "BACK" buttons.

Web Version 1.2
2011-03-07

● Function instruction

Function	Description
Remote Connection Port Number	<ul style="list-style-type: none"> Set local I/O port, the range is from 0 ~ 65535. Default setting is 50001
Remote Host IP Address	Default setting of remote host IP address is 0.0.0.0
Auto Report I/O Status	<ul style="list-style-type: none"> Automatically return I/O status Disable : No automatically return I/O Status State Changed: I/O status will be returned automatically when INPUT changes. Periodically : Set I/O status return automatically every few seconds. Through : I/O status will be returned thru Serial and ETH.

(4) UDP Mode

CYT-133SC

One Page Setup

Advanced Setup

- Serial Operation Mode
- Serial Type
- I/O Operation Mode
- I/O State Setup
- E-Mail Alert
- Dynamic DNS

Management

- Device Admin
- System Status
- I/O Status
- Backup & Restore
- Upgrade Firmware
- Ping

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2011-03-07

I/O Operation Mode Setup (UDP Mode)

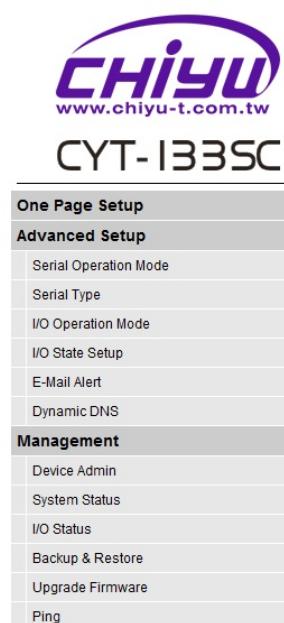
UDP Mode ▾

Remote Connection Port Number	50001 (0 - 65535)
Remote Host IP Address	0 . 0 . 0 . 0
Local Listen Port	50001 (0 - 65535)
Auto Report I/O Status	<input checked="" type="radio"/> Disable <input type="radio"/> State Changed <input type="radio"/> Periodically, for Every <input style="width: 20px;" type="text" value="0"/> seconds Through : <input style="width: 50px; height: 15px;" type="button" value="ETH"/>

● Function instruction

Function	Description
Remote Connection Port Number	<ul style="list-style-type: none"> Set local I/O port, the range is from 0 ~ 65535. Default setting is 50001
Remote Host IP Address	Default setting of remote host IP address is 0.0.0.0
Local Listen Port	Default setting of local I/O port is 50001
Auto Report I/O Status	<ul style="list-style-type: none"> Automatically return I/O status Disable : No automatically return I/O Status State Changed : I/O status will be returned automatically when INPUT changes. Periodically : Set I/O status return automatically every few seconds. Through : I/O status will be returned thru Serial and ETH.

(5) Peer to Peer



I/O Operation Mode Setup (Peer to Peer)

Peer to Peer ▾

Remote Peer IP	0 . 0 . 0 . 0
----------------	---------------

APPLY **CANCEL** **BACK**

Web Version 1.2

2011-03-07

● Function instruction

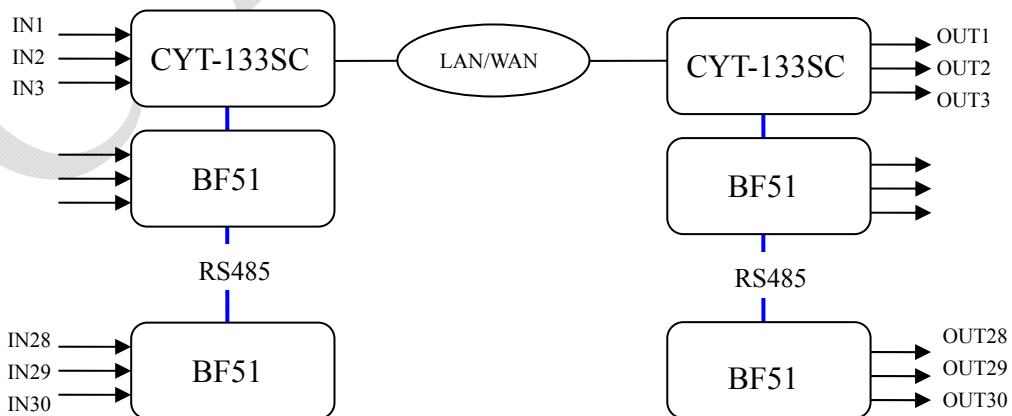
Function	Description
Remote Peer IP	Default setting of remote peer IP address is 0.0.0.0 .

Structure 1 :



Structure 2 :

Extend I/O Mode



4、I/O State Setup

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CYT-I33SC

One Page Setup
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I/O State Setup

Input Setup		
INPUT 1	Normal State: <input type="button" value="OPEN"/> <input type="button" value="SHORT"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23) Status: <input type="button" value="Activate"/>
INPUT 2	<input type="button" value="OPEN"/> <input type="button" value="SHORT"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23) Status: <input type="button" value="Activate"/>
INPUT 3	<input type="button" value="OPEN"/> <input type="button" value="SHORT"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23) Status: <input type="button" value="Activate"/>
Output Setup		
OUTPUT 1	Output Signal: <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23)
	Latch Time : <input style="width: 40px; height: 15px; border: 1px solid black;" type="text"/> (seconds)	
OUTPUT 2	Output Signal: <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23)
	Latch Time : <input style="width: 40px; height: 15px; border: 1px solid black;" type="text"/> (seconds)	
OUTPUT 3	Output Signal: <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>	Device Description: <input style="width: 100px; height: 15px; border: 1px solid black;" type="text"/> (0 - 23)
	Latch Time : <input style="width: 40px; height: 15px; border: 1px solid black;" type="text"/> (seconds)	

This page is for I/O operation setting when selecting I/O Operation Mode Setup (Auto). According to the INOUT signal changes can control OUTPUT external driver device. You can insert device name in **Device Description** for identification. You can also set up OUTPUT Latch Time for output time length. If the setting is 0 then OPTPUT can only be removed when INPUT status back to normal.

● Function instruction

Function	Description
INPUT 1	<ul style="list-style-type: none"> ● INPUT 1 status can set OPEN or SHORT, default setting is OPEN. ● Can set device name in Device Description for identification, up to 23 characters. ● STATUS : Set Enable or Disable INPUT1 detection
INPUT 2	<ul style="list-style-type: none"> ● INPUT 2 status can set OPEN or SHORT, default setting is OPEN. ● Can set device name in Device Description for identification, up to 23 characters. ● STATUS : Set Enable or Disable INPUT2 detection
INPUT 3	<ul style="list-style-type: none"> ● INPUT 3 status can set OPEN or SHORT, default setting is OPEN. ● Can set device name in Device Description for identification, up to 23 characters. ● STATUS : Set Enable or Disable INPUT3 detection
OUTPUT 1	<ul style="list-style-type: none"> ● OUTPUT 1 setting, when INPUT signal changes can set OUTPUT into OPEN or SHORT, default setting is SHORT. ● Can set device name in Device Description for identification, up to 23 characters. ● Set OUTPUT 1 duration, default setting is 0.
OUTPUT 2	<ul style="list-style-type: none"> ● OUTPUT 2 setting, when INPUT signal changes can set OUTPUT into OPEN or SHORT, default setting is SHORT. ● Can set device name in Device Description for identification, up to 23 characters. ● Set OUTPUT 2 duration, default setting is 0.
OUTPUT 3	<ul style="list-style-type: none"> ● OUTPUT 3 setting, when INPUT signal changes can set OUTPUT into OPEN or SHORT, default setting is SHORT. ● Can set device name in Device Description for identification, up to 23 characters. ● Set OUTPUT 3 duration, default setting is 0.

5、Alert Event E-Mail

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CYT-133SC

One Page Setup

Advanced Setup

- Serial Operation Mode
- Serial Type
- IO Operation Mode
- IO State Setup
- E-Mail Alert**
- Dynamic DNS

Management

- Device Admin
- System Status
- IO Status
- Backup & Restore
- Upgrade Firmware
- Ping

Alert Event via E-Mail

E-mail Alert :	<input style="border: 1px solid #ccc; width: 100px; height: 25px;" type="button" value="DISABLE"/>
Domain Name (optional):	<input style="width: 100%; height: 25px;" type="text"/> (maximum 59)
SMTP Mail Server :	<input style="width: 100%; height: 25px;" type="text"/> (maximum 47)
E-mail Alerts To :	<input style="width: 100%; height: 25px;" type="text"/> (maximum 47)
Return Address :	<input style="width: 100%; height: 25px;" type="text"/> (maximum 47)

● Function instruction

Function	Description
E-mail Alert	Enable or Disable event alert mail setting, default setting is Disable .
Domain Name (optional)	Domain name setting up to 59 characters, default setting is blank . (Non-required)
SMTP Mail Server	SMTP server setting, take msa.hinet.net for instance, the setting is up to 47 characters.
E-mail Alerts To	Receiver mail setting up to 47 characters.
Return Address	Sender mail setting up to 47 characters.

6、DDNS Setup

(1)TZ0

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Ping

DDNS Setup

DDNS Services: TZ0

Email Address:		(maximum 47)
Password key:		(maximum 31)
Device DNS Name:		(ex. hostname.tzo.com)
Registry IP Address :	192.168.3.169	
Status :	DDNS function is disabled	

APPLY CANCEL BACK

● Function instruction

Function	Description
E-mail Address	Fill in the E-mail address for DDNS , up to 47 characters
Password key	Fill in the password key for DDNS , up to 31 characters
Device DNS Name	Fill in the device DNS name , for example : hostname.tzo.com
Registry IP Address	Display the registry IP address , when DDNS is enabled, It will show the registry IP address
Status	Display DNS Serve status , when DDNS server does not enable ,it will show " DDNS function is disabled "

(2) DynDns

CYT-133SC

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System Status
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Backup & Restore
Upgrade Firmware
Ping

DDNS Setup

DDNS Services: **DynDns**

Username:	<input type="text"/>	(maximum 31)
Password:	<input type="password"/>	(maximum 31)
Device DNS Name:	<input type="text"/>	(ex. hostname.dyndns.org)
Registry IP Address :	0.0.0.0	
Status :	DDNS function is disabled	

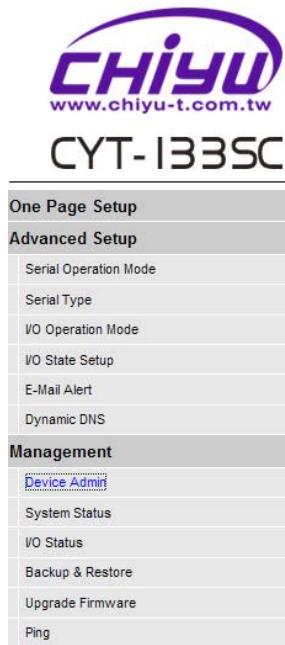
[APPLY] [CANCEL] [BACK]

● Function instruction

Function	Description
Username	Fill in the username for DDNS , up to 31 characters
Password	Fill in the password for DDNS , up to 31 characters
Device DNS Name	Fill in the device DNS name , for example : hostname.dyndns.org
Registry IP Address	Display the registry IP address , when DDNS is enabled, It will show the registry IP address
Status	Display DNS Serve status , when DDNS server does not enable ,it will show " DDNS function is disabled "

◆ Management

1、Device Administration Setting



Device Administration Setting

Block Standard Http Port(80) Management	<input checked="" type="radio"/> UNBLOCK <input type="radio"/> BLOCK <input type="text"/>	<input type="button" value="APPLY"/>
Device Management IP Address	<input type="text" value="192.168.200.200"/>	<input type="button" value="APPLY"/>
Device Hostname	<input type="text" value="CHIYU"/>	
Device Location	<input type="text"/>	
Administrator Password		<input type="button" value="APPLY"/>
User Name <input type="text"/>		
Password Change <input type="password" value="*****"/>		
Password Confirm <input type="password" value="*****"/>		
Block Ping Request	<input checked="" type="radio"/> UNBLOCK <input type="radio"/> BLOCK	<input type="button" value="APPLY"/>
MAC Address Change	<input type="text" value="00:00:00:00:00:00"/>	<input type="button" value="APPLY"/>
Reset System to Factory Default <input type="button" value="FACTORY DEFAULT"/>		
Reboot System <input type="button" value="REBOOT"/>		

● Function instruction

Function	Description
Block Standard Http Port(80) Management	<ul style="list-style-type: none"> ● Select unblock or block standard http port , default setting is UNBLOCK(80) ● If other port sequence has to be set, select BLOCK, and then fill in the port sequence.
Device Management IP Address	Display and set the device management IP address , default setting is 192.168.200.200
Device Hostname	Fill in the device hostname, default setting is CHIYU
Device Location	Fill in the device location , default setting is blank
Administrator Password	<ul style="list-style-type: none"> ● User Name : Fill in the user name ● Password Change : Change the password, for security reasons, please fill in a new password to replace the default management ● Password Confirm : Confirm the new password
Block Ping Request	Select unblock or block ping request function , default setting is unblock
MAC Address Change	If you want to change the MAC address, fill in the new MAC address
Reset System to Factory Default	Execute this function will reset system to factory default
Reboot System	Execute this function will reboot system

2、System Status Monitor

	
CYT-133SC	
One Page Setup Advanced Setup Serial Operation Mode Serial Type I/O Operation Mode I/O State Setup E-Mail Alert Dynamic DNS Management Device Admin System Status I/O Status Backup & Restore Upgrade Firmware Ping	
Web Version 1.2	
2011-03-07	

System Status Monitor		
Product Name:	CYT-133SC	System Status
Firmware Version:	1.02.00,Mar 8 2011	
System Up Time:	0H 3M 0S	
IP Configuration Mode:	STATIC IP	Ethernet Status
Operation Mode:	TCP SERVER	
Connection Port:	0	
I/O Operation Mode:	Peer to Peer	
I/O Connection Port:	50001	
MAC Address:	00:e:e3:01:b0:56	
IP Address:	192.168.3.110	
Subnet mask:	255.255.255.0	
Default Gateway:	192.168.3.1	
Primary DNS:	168.95.1.1	
STATUS:	Up	
Force Packet Time/Length:	20(ms)/1000(Bytes)	Serial Status
Baud Rate:	9600	
Data Bits:	8	
Parity Check:	none	
Stop Bits:	1	
Flow Control:	None	
Statistic		
Ethernet :	TX Bytes: 0 bytes	
	RX Bytes: 0 bytes	
Serial:	TX Bytes: 0 bytes	
	RX Bytes: 0 bytes	

● Function instruction

Function	Description
Product Name	Display the product name : CYT-133SC
Firmware Version	Display the firmware version : 1.02.00,Mar 8 2011
System Up Time	Display system up time , the sequence is hour/minute/second
IP Configuration Mode	Display the IP configuration , default setting is STATIC IP
Operation Mode	Display the operation mode , default setting is TCP SERVER
Connection Port	Display the connection port , default setting is 50000
I/O Operation Mode	Display the I/O operation mode , default setting is AUTO
I/O Connection Port	Display the I/O connection port , default setting is blank
MAC Address	Display the MAC address of CYT-133SC
IP Address	Display CYT-133SC address, default setting is 192.168.168.125
Subnet mask:	Display CYT-133SC Subnet mask, default setting is 255.255.255.0
Default Gateway	Display CYT-133SC Default Gateway, default setting is 192.168.168.254
Primary DNS:	Display CYT-133SC Primary DNS address, default setting is 168.95.1.1
STATUS	Display CYT-133SC internet status
Force Packet Time/Length:	Display Force Packet Time/Length, default setting is 20ms/1000bytes
Baud Rate	Display Baud Rate, default setting is 19200
Data Bits	Display Data Bits, default setting is 8
Parity Check	Display Parity Check, default setting is None
Stop Bits:	Display Stop Bits, default setting is 1
Flow Control:	Display Flow Control, default setting is None
Ethernet	RX & TX display the total data amount of data receive and transmission of Ethernet .
Serial	RX & TX display the total data amount of data receive and transmission of Serials .

3、I/O Status

(1) Non Extend I/O Mode

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CYT-133SC

One Page Setup

Advanced Setup

Serial Operation Mode

Serial Type

I/O Operation Mode

I/O State Setup

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Dynamic DNS

Management

Device Admin

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I/O Status

Backup & Restore

Upgrade Firmware

Ping

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2011-03-07

I/O Status Monitor

CYT133 Status			
INPUT :	INPUT 1:OPEN	INPUT 2:OPEN	INPUT 3:OPEN
OUTPUT :	OUTPUT 1:OPEN <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>	OUTPUT 2:OPEN <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>	OUTPUT 3:OPEN <input type="button" value="SHORT"/> <input type="button" value="OPEN"/>
<input type="button" value="Refresh"/>			

● Function instruction

Function	Description
INPUT 1	CYT-133SC INPUT 1 status display
INPUT 2	CYT-133SC INPUT 2 status display
INPUT 3	CYT-133SC INPUT 3 status display
OUTPUT 1	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 1 status display ● Click SHORT-1 or OPEN-1 manual control OUTPUT 1
OUTPUT 2	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 2 status display ● Click SHORT-2 or OPEN-2 manual control OUTPUT 2
OUTPUT 3	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 3 status display ● Click SHORT-3 or OPEN-3 manual control OUTPUT 3
Refresh	Click Refresh to get the I/O updated status.

(2)Extend I/O Mode

CYT-133SC

- One Page Setup**
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 - Serial Operation Mode
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I/O Status Monitor

CYT133 Status			
INPUT:	INPUT 1:OPEN	INPUT 2:OPEN	INPUT 3:OPEN
OUTPUT:	OUTPUT 1:OPEN [SHORT] OPEN	OUTPUT 2:OPEN [SHORT] OPEN	OUTPUT 3:OPEN [SHORT] OPEN
BF51(1) Status			
Status:	Offline		
INPUT:	1:X	2:X	3:X
OUTPUT:	1:X	2:X	3:X
BF51(2) Status			
Status:	Offline		
INPUT:	4:X	5:X	6:X
OUTPUT:	4:X	5:X	6:X
BF51(3) Status			
Status:	Offline		
INPUT:	7:X	8:X	9:X
OUTPUT:	7:X	8:X	9:X
BF51(4) Status			
Status:	Offline		
INPUT:	10:X	11:X	12:X
OUTPUT:	10:X	11:X	12:X
BF51(5) Status			
Status:	Offline		
INPUT:	13:X	14:X	15:X
OUTPUT:	13:X	14:X	15:X
BF51(6) Status			
Status:	Offline		
INPUT:	16:X	17:X	18:X
OUTPUT:	16:X	17:X	18:X

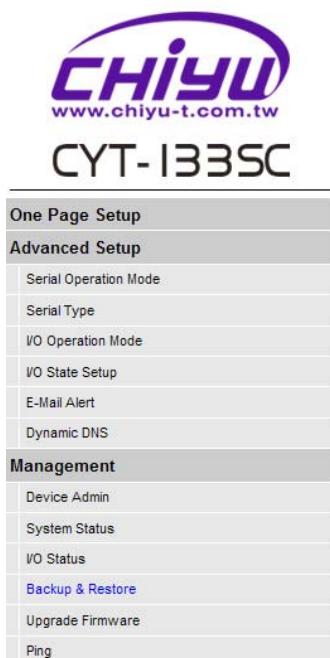
● Function instruction

Function	Description
INPUT 1	CYT-133SC INPUT 1 status display
INPUT 2	CYT-133SC INPUT 2 status display
INPUT 3	CYT-133SC INPUT 3 status display
OUTPUT 1	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 1 status display ● Click SHORT-1 or OPEN-1 manual control OUTPUT 1
OUTPUT 2	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 2 status display ● Click SHORT-2 or OPEN-2 manual control OUTPUT 2
OUTPUT 3	<ul style="list-style-type: none"> ● CYT-133SC OUTPUT 3 status display ● Click SHORT-3 or OPEN-3 manual control OUTPUT 3
Refresh	Click Refresh to get the I/O updated status.

BF-51 status

BF51(1~9)Status	BF-51 status display, (1~9) indicates TID of BF-51.
Status	BF-51 status display , Online or Offline
INPUT	BF-51 INPUT status display, X means disconnect.
OUTPUT	<ul style="list-style-type: none"> ● BF-51 OUTPUT status display, X means disconnection. ● Can click SHORT or OPEN manual control OUTPUT, X means disconnection.

4、Backup & Restore Configuration



Backup & Restore Configuration

Backup

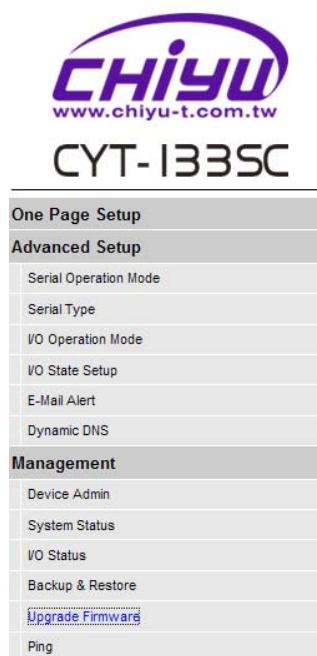
Restore

Please select a configuration file to restore :

● Function instruction

Function	Description
Backup	After execution, can save the present system settings as a backup file, and save it in hardware, the sub-name of the saved file is .cfg
Restore	Browse and select saved file(.cfg), execute Restore to restore system settings

5、Firmware Upgrade



Firmware Upgrade

Warning: Upgrade must NOT be interrupted

Please select a file to upgrade	<input type="button" value="浏览..."/>	<input type="button" value="UPGRADE"/>
---------------------------------	--------------------------------------	----------------------------------------

[Large blue progress bar]

● Function instruction

Function	Description
Please select a file to upgrade	<ul style="list-style-type: none"> ● Browse and select firmware, execute Upgrade to upgrade firmware ● Has to assure the possibility of power supply during the process of upgrading, or severe damage will be caused. What if upgrade different firmware to different products, and it will also cause severe damage.

6、PING

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CYT-133SC

One Page Setup

Advanced Setup

- Serial Operation Mode
- Serial Type
- I/O Operation Mode
- I/O State Setup
- E-Mail Alert
- Dynamic DNS

Management

- Device Admin
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- I/O Status
- Backup & Restore
- Upgrade Firmware

Ping

Networking Diagnostic (PING)

Source IP Address :	192.168.3.169			
Destination IP Address :	0 . 0 . 0 . 0			
Packet Number :	4 (1 ~ 4)			
Packet Size :	60 (maximum 1460 Bytes)			
Ping Result :	Sent Request:	0		
	Receive Reply:	0		

PING **CANCEL** **BACK**

● Function instruction

Function	Description
Source IP Address	Display CYT-133SC IP address
Destination IP Address	Input IP address of Remote Host
Packet Number	Set up the number of PING package, ranged 1 ~4 , the default 4
Ping Size	Set up the size of PING package, the utmost setting 1460 bytes.
Ping Result	<ul style="list-style-type: none"> ● Display Sent Request data ● Display Receive Reply data

Appendix A- CYT-133SC DIO Command Protocol

This DIO command protocol is described here to let customer's remote management software to access Digital I/O state through Ethernet network by a specific TCP/UDP port.

Command Packet Format: (Host → CYT-133SC)

Length(Bytes)	2	2	32	32	2	1
	Start Flag	Command	Data1	Data2	End Flag	CRC

Command:

0x0001 - Read Digital I/O state

0x0003 - Trigger Digital I/O

0x0005 - Auto Report Current I/O State Packet

Return Packet Format: (CYT-133SC → Host)

Length(Bytes)	2	2	32	32	2	1
	Start Flag	Command Status	Data1	Data2	End Flag	CRC

The CYT-133SC returns by Return packet. You can get command status to know the result after sending command packet and from Data1 and Data2 to know current I/O state.

Note:

Start Flag: 0xF0F0

End Flag: 0xF0F0

Command Status: the definition of command code is as following

0x0002 – ACK of Read Digital I/O state

0x0004 – ACK of Trigger Digital I/O

0x0006 – ACK of E-mail Alarm Trigger

0x0010 – Report current Digital I/O state (If Auto Report I/O Status is enabled, you will receive this report packet from CYT-133SC)

0xFFFFC – Flag error, incorrect Start Flag or End Flag received in command packet

0xFFFFD – Length error, the length of command packet is invalid

0xFFFFE – CRC error, incorrect CRC value

0xFFFF – Command error, no such command

CRC value = 0 – total sum from field of ‘Start Flag’ to “End Flag”

The format of each command code is as following:

1. Read Digital I/O state

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0001	Xxx (don't care)	Xxx (don't care)	0xF0F0	CRC

Return Successful Packet

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0002	Data1	Data2	0xF0F0	CRC

Data1

Data[0]	Data[1]			Data[28]	Data[29]	Data[30]	Data[31]
IN-1	IN-2			IN-29	IN-30	reserved	reserved

IN-1: state of IN1, 0 for SHORT, 1 for OPEN, 2 for Deactivated

IN-2: state of IN2, 0 for SHORT, 1 for OPEN, 2 for Deactivated

⋮

IN-30: state of IN30, 0 for SHORT, 1 for OPEN, 2 for Deactivated

Data2

Data[0]	Data[1]			Data[28]	Data[29]	Data[30]	Data[31]
OUT-1	OUT-2			OUT-29	OUT-30	reserved	reserved

OUT-1: state of OUT1, 0 for SHORT, 1 for OPEN, 2 for Deactivated

OUT-2: state of OUT2, 0 for SHORT, 1 for OPEN, 2 for Deactivated

⋮

OUT-30: state of OUT30, 0 for SHORT, 1 for OPEN, 2 for Deactivated

2. Trigger Digital I/O

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0003	Data1	Data2	0xF0F0	CRC

Data1

Data[0]	Data[1]			Data[28]	Data[29]	Data[30]	Data[31]
OUT-1	OUT-2			OUT-29	OUT-30	reserved	reserved

OUT-1: the value you want to write into OUT1, 0 for SHORT, 1 for OPEN

OUT-2: the value you want to write into OUT2, 0 for SHORT, 1 for OPEN

⋮

OUT-30: the value you want to write into OUT30, 0 for SHORT, 1 for OPEN

Data2 for Latch time in second

Data[0]	Data[1]			Data[28]	Data[29]	Data[30]	Data[31]
LT-1	LT-2			LT-29	LT-30	reserved	reserved

Return Successful Packet

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0004	Xxx (don't care)	Xxx (don't care)	0xF0F0	CRC

3. E-mail Alarm Trigger

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0005	Alarm Message Description	0xF0F0	CRC	

Alarm Message Description: string of alarm message by customer attach and CYT-133SC send this content by e-mail

Return Successful Packet

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0006	Xxx (don't care)	Xxx (don't care)	0xF0F0	CRC

4. Auto Report Current I/O State Packet (CYT-133SC to Host)

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0010	Data1	Data2	0xF0F0	CRC

Data1

Data[0]	Data[1]	Data[2]	Data[3]				Data[30]	Data[31]
IN-1	IN-2	IN-3	IN4				reserved	reserved

IN-1: state of IN1, 0 for SHORT, 1 for OPEN, 2 for Deactivated

IN-2: state of IN2, 0 for SHORT, 1 for OPEN, 2 for Deactivated

IN-3: state of IN3, 0 for SHORT, 1 for OPEN, 2 for Deactivated

Data2

Data[0]	Data[1]	Data[2]	Data[3]				Data[30]	Data[31]
OUT-1	OUT-2	OUT-3	reserved				reserved	reserved

OUT-1: state of OUT1, 0 for SHORT, 1 for OPEN

OUT-2: state of OUT2, 0 for SHORT, 1 for OPEN

OUT-3: state of OUT3, 0 for SHORT, 1 for OPEN

5. Keep Alive (Only useful when CYT-133SC's I/O mode is acting as TCP Client) : (CYT-133SC → Host)

Length(Bytes)	2	2	64	2	1
	0xF0F0	0x0007	RESV	0xF0F0	CRC

0x0007 – Keep Alive (new created)

Return Successful Packet (Host → CYT-133SC)

Length(Bytes)	2	2	32	32	2	1
	0xF0F0	0x0008	Xxx (don't care)	Xxx (don't care)	0xF0F0	CRC

0x0008 – ACK of Keep Alive (New created)

Appendix B- Remote reset command

a. CGI (URL) command

<http://192.168.1.125/reboot.htm@admin:admin>

b. CHIYU proprietary command, UDP connection/port 5050

	Byte
SNG	16
CMD	4

SNG (16 bytes): signature data, should be “**CHIYU Reboot CMD**” case sensitive.

CMD (4 bytes): 0x00 00 00 20

Return packet:

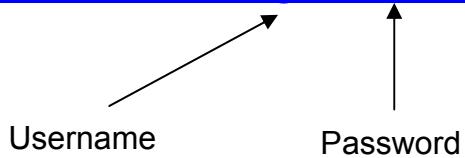
	Byte
SNG	16
ACK	4

SNG (16 bytes): signature data, should be “**CHIYU Reboot CMD**” case sensitive.

ACK(4 bytes): 0x00 00 00 21

Appendix C- CGI(URL) command for I/O control

- Get I/O Status : <http://192.168.3.125/iostatus.htm@admin:admin>



- Energize Output Relay command:

For example :

Energize Relay No.1 all the time

http://192.168.3.125/set_relay.php&no=1&time=0@admin:admin

Energize Relay No.2 and latch 10 seconds

http://192.168.3.125/set_relay.php&no=2&time=10@admin:admin

- Clear Output Relay command:

For example :

Clear Relay No.1

http://192.168.3.125/clear_relay.php&no=1@admin:admin

Clear Relay No.2

http://192.168.3.125/clear_relay.php&no=2@admin:admin