User Manual

Thank you for selecting our products. Please read this manual before use.



C2100 TCP-RS485

Converter



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Chapter 1: Summary

1.1 Technical Summary

The C2100 is a converter between RS485/422 and TCP/IP protocols.

Technical Points:

- 1. TCP: 10-100M Ethernet interface, the distance to a switch or HUB is up to 100 meters.
- 2. RS485/422: 110bps~230400Kbps Baud Rate.
- 3. Setting Parameter: Setting through internet browser.
- RS485 Output: Can support up to 127 terminals and up to 1200 meters (based on 9600Bps).
- 5. Dual Mode:
- TCP Server, C2100 will wait for the link command from Host (for example: a PC).
- TCP Client, C2100 will look for the Host (for example: a PC), and send link command to the Host.

Applications:

Access Control, T&A, POS, Car Parking, Power Station, Data Switch.

1.2 Features

- Work Mode: TCP Sever or TCP Client
- Power Supply: DC9V, 500ma
- Speed: 10 -100M
- Speed of COM Port: 110—230400bps
- Communication: RS485/RS422
- Ethernet Socket: RJ45 based on TCP/IP
- ♦ MCU: ARM7
- ♦ Work Environment: Temperature: -20°C--70°C, Humidity :5%---95%.
- ♦ Size: L90mm×W83mm×20mm

1.3 LEDs and Interface



Image #1-1 C2100 Converter Surface

- **1.3.1 LED for Communications**
 - **PWR: LED for Power Supply,**
 - **RX: Receiving Status LED,**
 - **TX:** Transmitting Status LED.
- **1.3.2 Ethernet Interface**



Image #1-2

RJ45 Cable: RJ45 socket.

Ethernet LED: When the cable is connected between the C2100 and a Switch HUB or PC,

the Ethernet ID will be lit.

Data LED: When the cable is connected between the C2100 and a Switch HUB or PC, the Data LED will flash.

1.3.3 Power Supply

DC 9V: the Power Supply should be 7~14VDC with a current capacity exceeding 500ma.

1.3.4 DIP Switch



Image #1-3

Switch	State	Function Description	Detail
	OFF	Write Protect	Parameters including Password, IP, Host IP
DIP 1		White Flotect	cannot be changed.
	ON	Configurable, Writeable	All parameters can be changed.
	OFF	Normal	
			When the IP address of the C2100 is not
DIP 2	ON	Force the IP of converter to	known, switch DIP2 to on. The IP address will
		the default IP 10.1.1.10	default to 10.0.0.10, and the password will
			default to "keyking"
2 010	OFF	Disable WDT	
DIP 3	ON	Enable WDT, more stable	Normally ON.
	OFF	Normal	Normally OFF
	ON	Reset the converter	Turn DIP4 ON for a second to reset

Sheet 1-1

DIP Switch Default Setting (Default Setting):

Switch	State	Description
DIP 1	ON	Configurable, Writeable
DIP 2	OFF	Normal
DIP 3	ON	WDT is enabled
DIP 4	OFF	Normal

Sheet 1-2

DIP Switch Normal Setting (Normal Operating Conditions):

Switch	State	Description
DIP 1	OFF	Write Protect
DIP 2	OFF	Normal
DIP 3	ON	WDT is Enabled
DIP 4	OFF	Normal

Sheet 1-3

1.4.5 Communication Interface

RS485/422: RS485/422 Interface

Pin	RS485	RS422
1	485-	T-
2	458+	T+
3	GND	GND
4		R+
5		R-

Sheet 1-4

2.2 Wiring

Chapter 2: Network Diagrams

2.1 Network Diagram



Image #2-1 C2100 Network Diagram



Image #2-2 C2100 wiring diagram with TC3XY

Please connect the wires as per the above diagram and below description. "C2100: 485+"-----"TC3XY:485+" "C2100: 485"-----"TC3XY:485-"

2.2 Cable

The cable between the C2100 and PC or Switch HUB can be a crossover or straight through cable.

2.2.1 Cable with Switch HUB (Normal Straight Through Cable)



Image #2-3 C2100 Straight through cable for use with Switch or HUB

2.2.2 Direct Connect Cable with PC (Crossover Cable)

Image #2-4 C2100 crossover cable with

use with PC



Chapter 3: Browser Settings

3.1 Diagram

Prior to installation please ensure either one of the following:

- Only connect 1 x C2100 converter in this network.
- If connecting multiple C2100 converters they must have different fixed IP addresses.
- Connect the C2100 to a PC directly, as per the image below.





3.2 Logon

C2100 Parameter:

Default IP: 192.168.1.100; The default IP address is 192.168.1.100.

Forced IP: 10.1.1.10; Set DP2 to the ON position.

Prior to running the browser you need to know the following:

- The C2100 IP Address, ie 192.168.1.100.
- That the current IP of the C2100 converter is in the same subnet as the PC that will be used to undertake the setting procedure, ie 192.168.1.X.
- If the current IP of C2100 is unknown, please refer to chapter 4.

Open Internet Explorer browser and type the current IP address of the C2100, for example: <u>http://192.168.1.100</u>. The following image will appear.

Ø Keyking C2100 Module - Tindows Internet Explorer ★ Ø http://192.168.1.100/		_□≥ ✓ ↔ × Google
文件 (E) 編辑 (E) 查看 (V) ☆ ☆ 後 Keyking C2100 M		□ - □ - ● · □ ① □ 0 · ○ 1 = 0 · · ○ 1 = 0 · · ○
Current IP of C2100)	KEYKING GROUP C2100 Module
Please enter your usernar	ne and password if	you want to setting the parameters!
	User Name: Password: Enter	reyking
<u>[</u>		
KEYKING GROUP	Outstanding in the field!	Copyright $\ensuremath{\textcircled{\odot}}$ 2008 Keyking Group. All rights reserved.
		🔰 🕞 💽 Internet 🕅 🔍 100% 👻

Image #3-2

After the password is entered (default password is "keyking" without capital letter),

click "Enter" to go to the screen below.

Æ Keyking C2100 ∎oč	dule – Vindows Internet Explorer	
😋 💽 🔻 🙋 //192.	168. 1. 100	Google Pr
文件(正) 编辑(正) 查	看 (V) 收藏夹 (A) 工具 (T) 帮助 (H)	
🔆 🍄 🏉 Keyking (C2100 Module	🟠 • 🗟 - 🖶 • 🔂 页面 E) • 🎯 工具 Q) • 🎽
KEYKING		KEYKING GROUP C2100 Module
	Status & Configuration	<u>*</u>
Home	Name: Keyking Group C2	100 Module
Port 0	Firmware Revision: Ver 1.2.4	
Settings	IP Address: 192.168.1.100	
Network Settings	MAC Address: 00-05-4f-00-00-06	
Firmware Update	Current port settings:	
		Port 0 Params
	Baud Rate:	9600 bits/second
	Data Size:	8 bits/character
	Parity:	None
	Elow Control:	1 DII(S)
	Local Telnet Port	8000
	Remote Telnet Port	8000
	Telnet Mode:	Client
	Telnet Server IP:	192.168.1.21
	Telnet Timeout:	0S
KEYKIN	G GROUP Outstanding in the 1	ïeld! Copyright © 2008 Keyking Group. All rights reserved.
完成		🗾 🗐 🕞 Internet 🔍 100% 👻

Image #3-3

There are 4 navigation menus on the left hand side of the screen. These are:

"HOME":	Homepage.
"Port0 Settings":	Serial COM Port Parameters.
"Network Settings":	Network Parameters.
"Firmware Update":	Firmware update for C2100 converter.

3.3 Homepage

•	Status	&	Configu	iration
---	--------	---	---------	---------

	Name:	Converter name, like Keyking Group C2100 Module;
	Firmware Revision:	C2100firmware version.
	IP Address:	The current C2100 IP, ie 192.168.1.100 (default value).
	MAC Address:	Every C2100 has a unique fixed Mac Address.
• Curr	ent Port Settings	
	Baud Rate:	Default value is 9600bps
	Data Size:	Data Length, default value is 8 bits
	Parity:	Odd/Even Parity, default is None.
	Stop Bits:	Default is 1bit
	Flow Control:	Default is None.
	Local Telnet Port:	The local Port of C2100, default value is 8000
	Remote Telnet Port:	The Host Port, default value is 8000
	Telnet Mode: Work Mode,	TCP/IP or Client, default is Client.
	Telnet Server IP:	Host IP.
	Telnet Timeout:	Default is 0.

3.4 COM Port Parameters

Click "Port0 Settings" in image #3-3, then image #3-4 will appear.

Settings:

The current settings for port 0 may be changed using the form below. To make the new settings apply each time the S2E module is reset, ensure that "Make these the default settings" is checked before pressing the "Apply Changes" button. If this control is not checked, the changes are applied to the port but the existing defaults are used whenever the module is next reset.



Image #3-4

3.4.1 Port0 Setting (Serial COM Port):

Baud Rate:	Default value is 9600bps
Data Size:	Data Length, default value is 8 bits
Parity:	Odd/Even Parity, default is None.
Stop Bits:	Default is 1bit
Flow Control:	Default is None.

3.4.2 Port Parameters (TCP Port)

Local Telnet Port:	The local Port of C2100, default value is 8000
Remote Telnet Port:	The Host Port, default value is 8000
Telnet Mode:	Work Mode, TCP/IP or Client, default is Client.

• TCP Server, C2100 will wait for the link command from the Host (for example: a

PC).

• TCP Client, C2100 will look for the Host (for example: a PC), and send a link

command to the Host. "TCP Client" mode use is recommended

Telnet Server IP:	Host IP.
Telnet Timeout:	Default is 0.
"Apply Changes":	Click Apply Changes to apply all changes.

3.5 Network Settings

Click "Network Settings" in image #3-3, then image #2-5 will appear.

3.5.1 IP Address Selection

IP Address Selection

Address Type:	Static IP 🔽
Static IP Address:	192 168 1.100
Subnet Mask:	255 255 255 0
Default Gateway:	192] 168] 1] 1
Up	date Settings



Address Type:

"DHCP/Auto IP" : Dynamic IP, C2100 converter will get an IP by

DHCP of router. This mode of operation is not recommended

"Static IP" : Fixed IP.

Static IP address: IP Address of C2100 converter, eg 192.168.1.100;

Subnet Mask: for example: 255.255.255.0;

Default Gateway: Gateway of this subnet, eg 192.168.1.1.

"Update Settings": After any parameters have been changed, please click "Update Settings"

to save the configuration.

3.5.2 User Name and Password

Username and Password

User Name:	keyking
Old Password:	
New User Name:	
New Password:	
Confirm Password:	
Change Password	

Image #3-6

User Name:

Old Password:

New User Name:

New Password:

Confirm Password:

"Change Password": After the parameters have been changed, please click "Change Password" to save the configuration.

3.5.3 General Configuration Settings

General Configuration Settings

Module Name:	Keyking Group C2100 Module
UPnP port number:	6432
	Update Settings

Restore Factory Defaults

Restore all options to their factory default states: Restore Defaults

Image #3-7

Module Name: Default value is Keyking Group C2100 Module, this can be modified by the

user.

UPnP Port number: Default value is 6432.

"Update Settings": After any parameters have been changed, please click "Update Settings"

to save the configuration.

3.5.4 Restore Factory Defaults

Click "Restore Defaults" button, then all parameter of C2100 will go back default value.

Chapter 4: Setting Steps

If the IP of the C2100 is not known and the default IP address of 192.168.1.100 is uncertain, follow the steps below:

Prior to installation please ensure either one of the following:

- Only connect 1 x C2100 converter in this network.
- If connecting multiple C2100 converters they must have different fixed IP addresses.
- Connect the C2100 to a PC directly, as per the image below.





4.1 Setting a New IP Address for the C2100

If you know the password and the IP address of the C2100, please proceed directly to Section 4.2.

- 1. Switch DIP1 and DIP2 to ON, DIP3 and DIP4 should be OFF.
- 2. Setup the IP address of the PC to 10.0.0.X, with X being any number from 1 to 254 except 10.
- 3. Open Windows Browser, and type http://10.0.0.10 and the following image will appear:

KEYKING Keyking Group

Keyking C2100 Bodule - Windows Internet Explorer		
G + http://10.0.0.10/		💌 🍫 🗙 Google 🖉 🔎 🔹
文件 (2) 编辑 (2) 查看 (Y) 收藏夹 (A) 工具 (1) 帮助 (4)		
😭 🏟 🏉 Keyking C2100 Module		🚹 • 🗟 - 🖶 页面 🕑 • 🎯 工具 🔍 • 🎽
KEYKING		KEYKING GROUP C2100 Module
Please enter your usernam	ne and password if	if you want to setting the parameters!
	User Name:) keyking
	Password:	
	Enter	
KEYKING GROUP	Outstanding in the field!	Copyright © 2008 Keyking Group. All rights reserved.

Image #4-2

4. Type the default password: keyking, and the following home page will appear:

🖉 Keyking C2100 🛙 od	dule - Windows Internet Explorer	
🕒 🕑 👻 🙋 http:	://10. 0. 0. 10/	Google
文件(E) 编辑(E) 查	看(V) 收藏夹(a) 工具(T) 帮助(b)	
😭 🕸 🏾 🏉 Keyking O	C2100 Module	🚹 • 🔂 - 🖶 • 🔂 页面 🕑 • 🎯 工具 🕘 - 🎽
KEYKING		KEYKING GROUP C2100 Module
	Status & Configuration	-
Home	Name: Keyking Group C	2100 Module
Port 0	Firmware Revision: Ver 1.2.4	
Settings	IP Address: 10. 0. 0. 10	
Network Settings	MAC Address: 00-05-4f-00-00-06	
Firmware Update	Current port settings:	
•		Port 0 Params
	Baud Rate:	9600 bits/second
	Data Size:	8 bits/character
	Stop Bits:	1 bit(s)
	Flow Control:	None
	Local Telnet Port:	8000
	Remote Telnet Port:	8000
	Telnet Mode:	Client
	Telnet Server IP:	10. 0. 0. 88
	Telnet Timeout:	US
KEYKING	G GROUP Outstanding in the	field! Copyright © 2008 Keyking Group. All rights reserved.
完成		📑 🚱 Internet 🔍 100% 👻

Image #4-3

5. Click "Network Setting", and the following image will appear. Allocate the C2100 a static

IP Address, for example 192.168.1.100. Then click "Update Setting". A message

will appear to say that the software "Can not find the page".

Address Type:	Static IP 💌
Static IP Address:	
Subnet Mask:	255 255 255 0
Default Gateway:	
Up	date Settings



6. Done.

4.2 Setting the Server IP Address

- 1. Switch DIP1 to ON, and DIP2 to OFF. DIP3 and DIP4 should be OFF.
- Allocate the PC an IP address in the same subnet as the C2100. If the IP address of the C2100 is 192.168.1.100, then the PC IP address should be 192.168.1.X where X equals any number between 2 and 254 except 100 which is the same IP address as the C2100.
- 3. Open Windows browser, and type <u>http://192.168.1.100</u>. The Logon interface will

appear. Click "Port0 Setting" and the following image will appear.

Settings:

The current settings for port 0 may be changed using the form below. To make the new settings apply each time the S2E module is reset, ensure that "Make these the default settings" is checked before pressing the "Apply Changes" button. If this control is not checked, the changes are applied to the port but the existing defaults are used whenever the module is next reset.

	Current	Updated	
Baud Rate:	9600 bits/second	9600 💌 bits/S	
Data Size:	8 bits/character	8 v bits/character	
Parity:	None	None 💌	
Stop Bits:	1 bit(s)	1 bit(s) Host IP please change to the	Host
Flow Control:	None		, 11050
Local Telnet Port:	8000	⁸⁰⁰⁰ IP, like 192.168.1.4	J
Remote Telnet Port:	8000	8000	
Telnet Mode:	Client	Client 🗸	
Telnet Server IP:	192.168.1.21	192 168 1 4	
Telnet Timeout:	Oseconds	0 seconds (0 for no timeout)	
	Apply Changes		



- 4. Type the IP address of the PC as the Host IP (Telnet Server IP), like 192.168.1.4, and click "Apply Changes".
- 5. Switch DIP1 to OFF, and DIP2 to OFF. DIP3 and DIP4 should be OFF.
- 6. Done.

4.3 Search for the Controller by the Sphinx4 Software

- 1. Run the Sphinx4 software.
- 2. Click Setup/Hardware/Controller Configuration and the image below will appear.

Controlle	r Configuration								
Controller List:									
Controller ID	Name	Model	Firmware	Connection Line	ID	Host PC	COM/IP		^
4	Controller(4 Doors,In/Out	tTC348	V36.76	Image: A start of the start	0 DAVIDI		192.168.2.107		
6	Controller(006)	TA7001	V35.00		1 DAVIDI		COM1		
1	Search	TC348	V36.76	V	2 DAVIDI		192.168.2.106		
Total:	3		On-line:	2					~
Search	Add De	elete	Edit	Refresh	Download C	Configuration	Download Config to A	ll (Local)	Close

3. Click the "Search" button and the following image will appear:



4. Choose "TCP/IP" option, and click "Search" on the above image. The following

image will appear:

se

5. Any controllers which are connected to the C2100 converter should now be found and listed on the right hand side of the above screen. Once all the controller(s) are listed click the "Stop" button. The image below shows a single controller has been found.



arch Uptions	Please sele	ct controllers				
COM Port	ID	Model	Firmware	Total Groups	Total Number of Cards	COM/IP
		TC344	V36.82	5	5	192.168.1.100
0.0.0.0		>				
192.168.1.100		Tick	the box	to		
		selec	t	this		
		contr	coller		Click "Sa	ve"
Refresh					7/	

6. Select the controller to be saved into the database by ticking the box then click the

🕵 Controlle	r Configuratio	n				
Controller List:						
Controller ID	Name	Model Firmware	Connection L	ine ID Host PC	COM/	P Mac Address
	his is the components to proverter throu terface.	ntroller which the C2100 gh the RS485	n D 5	This is the IP address of the C2100		This is the Mac Address of the C2100
Total: 1		On-line:	1			

Download Config to All

7. Done.

Download Configuration

Download Config to All (Local)

Close

Chapter 5: Remote Control based on Client

If the C2100 is to be controlled through the internet follow the steps below:

Note that the Router 1# must either:

- Have a Global fixed IP, like 124.93.56.37 or
- Supports the "Map Port" feature.

For example:

The image #5-1 gives the following parameters:

No.	Item	Value	Description
	Host Server IP	192. 168. 0. 2	
T ANT 1	Router #1 IP in LAN	192. 168. 0. 1	
LAN I	Gateway #1	192. 168. 0. 1	
	Router Global IP	124.93.56.37	Global Fixed IP
	C2100 IP	192. 168. 1. 100	
	Router #2 IP in LAN	192. 168. 1. 1	
LAN 2	Gateway #2	192. 168. 1. 1	
	Router Global IP	Dynamic	Like 121.35.94.126



Image #5-1

5.1 Setup C2100 in LAN2

Connect the C2100 to a PC directly and setup all parameters as follows.

- 1. Allocate the C2100 a fixed IP, like 192.168.1.100, and setup the Gateway to 192.168.1.1.
- 2. Setup the Telnet Server IP to the Router #1 (eg 124.93.56.37).
- 3. Setup the C2100 to work under "TCP Client" mode.

5.2 Map the Port of #1 Router to Host PC

Allocate a fixed IP to the Host Server, eg 192.168.0.2, and setup the Gateway to 192.168.0.1.

With the administrator password, logon to Router #1 by typing http://192.168.0.1

1. Establish the Map function for the Host, select a free port (eg 8000)

Eg: map rule Intranet 192.168.0.2:8000; Extranet8000. protocol: TCP

🏄 TL-R410多功能宽带路由器 - Mic	rosoft Internet Explorer			_	
文件(E) 编辑(E) 查看(∀) 收藏(A) 工具(T) 帮助(H)				1
⇔后退 • ⇒ • 🙆 🖗 🖓 🔞).搜索 🗟 收藏夹 🛞 媒体	ः 🎯 🖪 • 🎒 💽 • 🎚	🗐 🗭 隆 🗐		
地址(D) 🙆 http://10.1.1.200/				▼ 🔗转到 🕯	接 »
TP-LINK	G		SOHO M	BBB	图
					~
	虚拟服务器				
• 运行状态	虚拟服务器定义	了广域网服务端口和局域网	网络服务器之间的明	映射关系,所	
 ● 设置何号 ■ (1 · 0 · m) 	有对该广域网服务	<mark>落端口的访问将会被重定</mark> 位	给通过IP地址指定的	的局域网网络	
◆ 网络参数	服务器。				
+ DHCP服务器	ID 服务端口	口 IP地址	协议	启用	
- 转发规则	1 8000	10 1 1 6	TCP 🔽	V	
 ・ 歴	2	10.1	ALL V		
 特殊应用程序 	-				
• DMZ主和L				_	
◆ 安全设置	4	10. 1			
	常用服务端口:	DNS (53) 🔻 填名	2到 11 1 ▼		
◆ 系统工具					
	上一页下一页	· 清空 保存 帮助	h		
TP-LINK路由器系列					
TL-R400+				Toteroet	
6					

- Port #8000 cannot be occupied by another system. If port #8000 is in use then use another port like #8001.
- 3. Save all changes and restart the router.

Once sections 5.1 and 5.2 have been completed then the C2100 will look for the Host server via the internet.

5.3 Search for the Controller by the Sphinx4 Software

- 1. Run Sphinx4.
- 2. Click Setup/Hardware/Controller Configuration and the image below will appear.

	r Configuration						
Controller List:							
Controller ID	Name	Model	Firmware	Connection Line ID	Host PC	COM/IP	^
4	Controller(4 Doors,In/Out	t TC348	V36.76	~	0 DAVIDI	192.168.2.107	
6	Controller(006)	TA7001	V35.00		1 DAVIDI	COM1	
1	Controller(4 Doors,In/Dul	tTC348	∨36.76	V	2 DAVIDI	192.168.2.106	
	Searc	h					
Total:			On-line:	2			✓
Search	Add D	elete	Edit	Refresh	Download Configuration	Download Config to /	All (Local) Close

3. Click "Search" and the following image will appear.

	🐱 Search and Upload Contro	oller	
	Search Options	Please select controllers ID Model Firmware Total Groups Total Number of Cards COM/IP	
		The C2100 with IP address 121.35.94.126 i	s
	☑ 121.35.94.12	already listed here. If this IP address cannot b	e
Choose "TCP/IP"		seen, this means that this PC is not the HOST a	S
option.		far as the C2100 is concerned. The Host I	P
opnom		computer's IP address.	8
Click "Search"	Refresh		
Button.	Search	Total Groups: U Total Number of Cards: 0	Close

4. Choose "TCP/IP" option, and click "Search". The following image will appear:



KK Search and Upload Contro	ller						
Search Options	Please sele	ect controllers					
COM Port	ID	Model	Firmware	Total Groups	Total Number of Cards	COM/IP	
COM1 V	3	TC344	V36.82	0	0	121.35.94.126	
0.0.0.0							
✓ 121.35.94.126							
Refresh							
	Total Grour	18.	0	Total Numbe	r of Cards: 1	1	
			ĭ		Course University		
					Save Upload	& Save Llos	e

5. Any controllers which are connected to the C2100 converter should now be found and listed on the right hand side of the above screen. Once all the controller(s) are listed click the "Stop" button. The image below shows a single controller has been found.

📧 Search and Upload Contro	ller	X
Search Options	Please select controllers ID Model Firmware Total Groups Total Number of Cards CDM/IP	
	Image Fore croups Fore croups <th< th=""><th></th></th<>	
⊻ 121.35.94.126	Tick this box to	
	select this Click "Save"	
		1
Refresh	Tabl Groups: 0 Tabl Number of Cardy 0	
Search	Save Upload & Save Close	

6. Select the controller to be saved into the database by ticking the box then click the "Save" button. Click "Close", and the controllers will appear in the next screen.



Controller Configuration							
Controller List:							
Controller ID Name Model Firmware Connection Line ID Host PC COM/IP Mac Address 3 Controller (4 Doors.In)(003) TCr44 V36.82 Image: Connection Line ID Host PC COM/IP Mac Address 3 Controller(4 Doors.In)(003) TCr44 V36.82 Image: Connection Line ID Host PC COM/IP Mac Address 4 V36.82 Image: Connection Line ID Host PC COM/IP Mac Address 5 Controller(4 Doors.In)(003) TCr44 V36.82 Image: Connection Line ID Host PC COM/IP Mac Address 6 Mac Controller(4 Doors.In)(003) TCr44 V36.82 Image: Connection Line ID Host PC COM/IP Mac Address 6 Connection Line ID The IP address The Mac Address of C2100 C2100 C2100 C2100 Controller Controler Controller Controler							
Total: 1 On-line: 1 Search Add Delete Edit Change Host Refresh Download Configuration Download Config to All (Local) Download Config to All Close							

7. Done.

Chapter 6: Remote Control based on Server

If the C2100 is to be controlled through the internet follow the steps below:

Note that the Router 2# must either:

- Have a Global fixed IP, like 121.35.94.126 or
- Supports the "Map Port" feature.

For example:

The image #6-1 gives the following parameters:

No.	Item	Value	Description
	Host Server IP	192. 168. 0. 2	
TANT 1	Router #1 IP in LAN	192. 168. 0. 1	
LAN I	Gateway #1	192. 168. 0. 1	
	Router Global IP	124.93.56.37	Dynamic IP or Global Fixed IP
	C2100 IP	192. 168. 1. 100	
	Router #2 IP in LAN	192. 168. 1. 1	
LAN 2	Gateway #2	192. 168. 1. 1	
	Router Global IP	121.35.94.126	Global Fixed IP



Image #6-1

6.1 Setup the C2100 in LAN2

Connect the C2100 to a PC directly and setup all parameters as follows.

- 1. Allocate the C2100 a fixed IP, eg 192.168.1.100, and setup the Gateway to 192.168.1.1.
- 2. Setup the Telnet Server IP to the Router #1 eg 124.93.56.37.
- 3. Setup the C2100 to work under "TCP Server" mode.

6.2 Map the Port of #2 Router to C2100

On the C2100 location side of the internet, ADSL or a popular internet such as VPN can be used. Even though a fixed IP address for this Router is preferable, this is not mandatory as a dynamic IP address will suffice.

Using an administrator password connect to Router #2 through the Windows browser by typing <u>http://192.168.1.1</u>.

1. Establish the Map function for the C2100 and select a free port (eg 8000) Eg: map rule Intranet 192.168.1.100:8000; Extranet8000.protocol: TCP

🖉 TL-R410多功能宽带路由	a器 - Microsoft Internet Explorer	<u>_ ×</u>
文件(E) 编辑(E) 查看(∀)) 收藏(A) 工具(I) 帮助(H)	-
🕁 后退 👻 🔿 🚽 🙆 😥	🖄 🔍 搜索 🗟 收藏夹 🛞 媒体 🧭 🔂 - 🎒 🖸 - 🗐 🗭 🏠 🚔	
地址(D) 🙆 http://10.1.1.200	0/ 🔽 🔗转到	链接 >>
TP-LINK	<	8
 运行状态 	虚拟服务器	
 ・设置向导 ◆ 网络参数 	產的服务器定义了)或內服务端口和海域內內對服务器之间的获到天然,所 有对该广域网服务端口的访问将会被重定位给通过IP地址指定的局域网网络 服务器。	
+ DHCP服务器 - 转发规则		
• 虚拟服务器 • 特殊应用程序	2 10.1 ALL .	
 ■ DMZ主机 + 安全设置 	3 10. 1 ALL 4 10. 1 ALL	
 ◆ 路由功能 ◆ 系统工具 	常用服务端口: DNS (53) 🔽 填空到 ID 1 🔽	
TP-LINK路由器系列	上一页 下一页 洁 空 保 存 帮 助	
TL-R400+	🔹 👘 👔 Internet	-

Port #8000 cannot be occupied by another system. If port #8000 is in use then use another port like #8001.

2. Save all changes and restart the router..

6.3 Adding a Controller in the Sphinx4 Software

- 1. Run Sphinx4.
- 2. Click Setup/Hardware/Controller Configuration and the below image will appear.

Controlle	r Configuration							
Controller List:								
Controller ID	Name	Model	Firmware	Connection Line ID	Host PC	COM/IP		^
4	Controller(4 Doors,In/Ou	t TC348	V36.76		0 DAVIDI	192.168.2.107		
6	Controller(006)	TA7001	V35.00		1 DAVIDI	COM1		
1	Controller(4 Doors,In/Ou	tTC348	V36.76	 	2 DAVIDI	192.168.2.106		
	Click f	he						
	Cher t							
	Add but	ton						
T	/		0 r	•				
Total:	3		Un-line:	2				<u> </u>
Search		elete	Edit	Befresh [ownload Configuration	Download Config to A	(lacol)	Close
			Lak		sermidda conngarddorr			01000

 Click the "Add" button and the following image will appear. Proceed as listed in the image. KEYKING Keyking Group

	Edit a Controller 🛛 🗙	
Choose a correct "ID" for the	Controller ID Mode ID TC344 Controller(4 Docrean) ❤	Choose the controller model.
controller which connects to the C2100. Choose "TCP/IP" option.	Name Controller(4 Doors,In)(003) Connection COM Port COM Port	Setup the MAC Address of the C2100 IP, eg 00-05-4F-00-01-03
	Mac Address 00054F000103 IP Address 121.35.94.125 COM Port 42744 OK Cancel	Setup the IP address of the C2100, eg 121.35.94.126

4. Once the above items have been completed then click OK, and the following image

will appear.

🐻 Controller Configuration							
Controller List:							
Controller ID	Name	Model	Firmware	Connection Line ID	Host PC	COM/IP	Mac Address
3	This is the con which connects C2100 converter the RS485 inte	troller to the through rface.	1	Th	e IP address of the C2100		The Mac Address of C2100
Total: 1 On-line: 1							
Search Add Delete Edit Change Host Refresh							
Download Configuration Download Config to All (Local) Download Config to All Close							

5. Done.