

BF-430 User Manual

Document Version 1.0 Web Version realcom 2009-02-07 Firmware Version 1.13.00,Apr 4 2011





[Index]

I Hardware Introduction	1
II ৲ Product Overview	3
III、WEB Login	4
IV、Web Function Instruction	
One Page Quick Setup	10
Advanced Setup	13
1 Operation Mode Setup	13
(1)TCP Server	
(2)TCP Client	14
(3)UDP Server	15
(4)UDP Client	16
2 Serial Port Setup	17
3 DDNS Setup	
(1)TZ0	
(2) Dyndns	19
Management	20
1 Device Administration Setting	20
2 System Status Monitor	21
3 Backup & Restore Configuration	22
4 Firmware Upgrade	23
5 、 PING	24

Copyright @ 2011. All Rights Reserved.

All trademarks and trade names are the properties of their respective owners.



-BF-430-

I > Hardware Introduction

Appearance



Specification

ltem	Specification
Ethernet Interface	10/100Base-T,half/full duplex
Signal Port	R\$232/485/422
RS232 Signal	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND, Baud Rate:1200bps~230.4kbps
RS485 Signal	2 wire Data+/- (only for BF-430)
RS422 Signal	4 wire R+/R-/T+/T- (only for BF-430)
CPU	16 bit CPU, 100MHz
Memory	256K ROM & 768K SDRAM
Watch Dog	System never halts
I/O Support	No
LED	4, Power / RXD / TXD / ACT
Power	$DC = \frac{30}{300} mA$
Requirement	DC 9~30V, 300 IIIA
Power	300 mA(9)/)
Requirement	500m/((5V)
EMI/EMC	FCC B, CE B
Certification	
System	Operation temperature $0 \sim 65 C$
Requirement	Storage temperature -20 \sim 85 (
Surge Bretestion	Seriel port 15 KV ESD
Surge Protection	Senal port 15 KV ESD
Magnetic	Ethernet port 1.5 KV
Connector Type	DB9(IVIale)/KJ-45
Reset Button	Yes



End point

RS-232 pin definition(DB-9)





II → **Product Overview**

BF-430 is a RS232/RS485 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 BF-430 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 BF-430 is simple, easily to operate, and without operation system limitation.

• Features

- BF-430 support 4 kinds of connection: TCP server / client 及 UDP server / client, Users can select suitable connecting way.
- Support DHCP Client, when activate this function, BF-430 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 BF-430 connect with dynamic IP by fixed Domain Name, enable hosts situated in different location to get access to BF-430 through internet.
- Auto detecting 10/100 M Ethernet.
- Enable users to conduct data access or management on BF-430 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.



III > WEB Login

BF-430 contains a HTTP server, thus BF-430 can link and connect through Web browser, and then conduct setting.



Before conducting BF-430 setting, please assure the following:

- PC has connected to BF-430, and PC and BF-430 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 BF-430.



How to search BF-430

 After installation of BF-430 and network cable is completed, use BF-430's <u>IP Search</u> to search all BF-430 in a certain LAN, or download IP Search tool from <u>CHIYU</u> homepage. Desktop icon as below:



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

Device Name Location Model Name IP Address Subnet mask Gateway MAC / 1 CHIYU BF430 232/485 TCP/IP Converter 192.168.168.125 255.255.255.0 192.168.168.254 00 0E	CAddr DE E3
I CHIYU BF430 232/485 TCP/IP Converter 192.168.168.125 255.255.2 192.168.168.254 00 0E	DE E3
Refresh	
Atheros L2 Fast Ethernet 10/100Base-T	
Subnet Mask : 255 255 0 OB Broadcast	
Spoific IP Address	
Gateway: 192 168 168 254 192.168.168.125	
Subnet Mask : 255.255.255.0 Mac Address : 00 0E E3 01 36 46 PS:	
IP 192.168.0.0 scan 192.168.0.1 192.168.0.255	5
IP 192.168.0.66 only scan	-
Active Route :	



3 While the IP Search window shows up, it will display all BF-430 in LAN, and show its Device name, Location, Model Name, IP Address, Subnet Mark, Gateway, Mac Address. Select particular BF-430, then its related information will appear below the window, as shown:

theros L2 Fast Ethernet 10/100Base-T	Â	IP Address : 192 168 168 125 Search
Controller	E	Subnet Mask : 255 255 0 Broadcast
Active Route :		Gateway : 192 168 168 254 192.168.168.125
Subnet Mask : 255.255.255.0 Gateway : 192.168.3.1		Mac Address : 00 0E E3 01 36 46 PS: IP 192.168.0.0 scan 192.168.0.1*192.168.0.2 IP 192.168.0.66 only scan
Active Route :	-	Alter 192.168.0.66

4 The showed information of BF-430 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:

				1	1		
Device Name	Location	Model Name		IP Address	Subnet mask	Gateway	MAC Add
CHIYU		BF430 232/485 T	CP/IP Converter	192.168.168.125	255.255.255.0	192.168.168.25	4 00 OE E3
Atheros L2 Fast Eth Controller Active Route : IP Addres Subnet M. Gateway : Active Route :	ernet 10/10 s : 192.168 ask : 255.25 : 192.168.3.	IP-Search Success ! OBase-T	Please Refresh A OK IP Address : Subnet Mask : Gateway : Mac Address :	gain After 5 Seco	nds ! 168 . 125 255 . 0 168 . 254 Alter	Refresh Search C Broadcast © Spoific IP Add 192.168.068.0125 PS: IP 192.168.0.0 scar 192.168.0.11192.11 IP 192.168.0.66 on 192.168.0.66	ress 68.0.255 by scan



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

Device Name	Location	Model Name		IP Address	Subnet mask	Gateway	MAC Ad
CHIYU		BF430 232/485	TCP/IP Converter	192.168.168.1	25 255.255.255.0	192.168.168.25	4 00 OE E
]							
Atheros I 2 East Fl	therpet 10/10	00Base T	IP Address :	192 168	168 125	Refresh	Fig-1
Atheros L2 Fast El Controller	thernet 10/10	00Base-T	IP Address : Subnet Mask :	192 168	168 . 125	Refresh Search O Broadcast	Fig-1
Atheros L2 Fast El Controller	thernet 10/10	00Base-T	IP Address : Subnet Mask :	192 168 255 255		Refresh Search C Broadcast © Spcific IP Add	Fig-1
Atheros L2 Fast Er Controller Active Route : IP Addre	thernet 10/10	00Base-T	IP Address : Subnet Mask : Gateway :	192 [168 255 [255 192 [168	. 168 . 125 . 255 . 0 . 168 . 254	Refresh Search © Broadcast © Spcific IP Add [192.168.168.125	Fig-1
Atheros L2 Fast El Controller Active Route : IP Addre Subnet I Gatewag	thernet 10/10 ess : 192.168 Mask : 255.21 y : 192.168.3	00Base-T	IP Address : Subnet Mask : Gateway : Mac Address :	192 168 255 255 192 168 00 0E E3 01 36	[168], [125 [255], [0 [168], [254] [6	Refresh Search C Broadcast Spcific IP Add 192.168.168.125 PS:	Fig-1
Atheros L2 Fast El Controller Active Route : IP Addre Subnet I Gateway	thernet 10/10 ess : 192.168 Mask : 255.2 y : 192.168.3	00Base-T	IP Address : Subnet Mask : Gateway : Mac Address :	192 168 255 255 192 168 00 0E E3 01 36 4	. 168 . 125 . 255 . 0 . 168 . 254 	Refresh Search C Broadcast © Spoific IP Add 192.168.168.125 PS: IP 132.168.0.0 scar 192.168.0.1~132.11	Fig-1
Atheros L2 Fast El Controller Active Route : IP Addre Subnet I Gateway	thernet 10/10 ess : 192.168 Mask : 255.2 y : 192.168.3	00Base-T	IP Address : Subnet Mask : Gateway : Mac Address :	192 168 255 255 192 168 00 0E E3 01 36	168 125 255 0 168 254	Refresh Search © Broadcast © Spcific IP Add [192.168.168.125 PS: IP 192.168.0.66 onl 192.168.0.66 onl 192.168.0.66 onl	Fig-1

- 6 After modification, the IP address of BF-430 has matched with its WAN, if want to get access into the Web of BF-430, has two methods:
 - (1)Open IP Search, select and double click particular BF-430, then to enter its webpage.
 - (2)While the internet explorer opened, input BF-430 IP address to enter its webpage

Remark :

WINDOWS XP:

《Step 1》

Click WINDOWS XP my computer My Computer , Open Control Pan Secontrol 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 BF-430, as below figure:



🚽 Local Area Connection Properties 🔗 🔀	Internet Protocol (TCP/IP) Properties
General Advanced	General
Connect using: Image: Why are Accelerated AMD PCNet Ad Configure	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
This connection uses the following items:	Obtain an IP address automatically
🗹 畏 QoS Packet Scheduler 🛛 🔼	● Use the following IP address:
☑ 3 Network Monitor Driver	IP address: 1005100510051005 192 . 168 . 168 . 68 . 68
The Internet Protocol (TCP/IP)	Subnet mask: 255 . 255 . 0
	Default gateway: 192 . 168 . 168 . 1
	Obtain DNS server address automatically
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication	Use the following DNS server addresses:
across diverse interconnected networks.	Preferred DNS server: 168 . 95 . 1 . 1
Show icon in notification area when connected	Alternate DNS server:
Notify me when this connection has limited or no connectivity	Advanced
OK Cancel	OK Cancel

WINDOWS 7:

《Step 1》

Click Windows 7 icon,

select Panel , open and search for ,

Network and Sharing 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), then input the same setting as BF-430, as below figure:

Local Area Connection Properties	X	Internet Protocol Version 4 (TCP/	IPv4) Properties
Networking		General	
Connect using: Intel(R) PRO/1000 MT Network Connection		You can get IP settings assigned this capability. Otherwise, you ne for the appropriate IP settings.	automatically if your network supports eed to ask your network administrator
Configu This connection uses the following items:	re	Obtain an IP address autom	atically
Client for Microsoft Networks		 Ouse the following IP address 	s:
QoS Packet Scheduler		IP address:	192 . 168 . 168 . 68
Image: State and Printer Sharing for Microsoft Networks Image: State Protocol Version 6 (TCP/IPv6)		Subnet mask:	255.255.255.0
Internet Protocol Version 4 (TCP/IPv4)		Default gateway:	192.168.168.1
 Link-Layer Topology Discovery Responder 		Obtain DNS server address	automatically
		 O Use the following DNS served 	er addresses:
Install Uninstall Propertie	es	Preferred DNS server:	168.95.1.1
Description Transmission Control Protocol /Internet Protocol. The defa	uit l	Alternate DNS server:	• • • •
wide area network protocol that provides communication across diverse interconnected networks.		Validate settings upon exit	Advanced
ОК	Cancel		OK Cancel



\blacklozenge

How to login to BF-430 Web via web browser

- 1 Start Web browser (ig: WIN 7 IE), input BF-430's IP Address, for example: use the default BF-430 IP Address: <u>http://192.168.168.125</u>
- 2 · If connection failed, should check:
 - If BF-430 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 BF-430 connection, input command: ping 192.168.168.125, as shown below:



- 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 BF-430's IP address
- Set the PC's IP address with BF-430's IP address with same segment, if the PC uses fixed IP address, the address must be ranged in: 192.168.168.168.1 ~ 192.168.168.65 or 192.168.168.67 ~ 192.168.168.254, thus it can be compatible with BF-430'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 BF-430 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:

Windows Security		
The server 192.	168.3.158 at requires a username and password.	
Warning: This s sent in an insec connection).	erver is requesting that your username and password ure manner (basic authentication without a secure	lbe
	User name Password Remember my credentials	
	ОК Са	ncel

4 • While the user name and password entered, a Web setting interface of BF-430 will be showed, enter it will then display a " **One Page Quick Setup** " page.

•••	One Page Quick Setu	ıp (Fixed IP)
€ ¥	TYPE: STATIC IP	•
RE-/130	IP Address	192 168 168 125
Main Menu	Subnet mask	255 . 255 . 0
<u>One Page Setup</u>	Gateway	192 . 168 . 168 . 254
Advanced Setup	Primary DNS	168 .95 .1 .1
 <u>Operation Mode</u> 	Serial Port Mod	de
■ <u>Serial Type</u>	Serial Type	RS232 -
<u>Dynamic DNS</u>	Baud Rate	19200 -
Management		0 (User Defined)
Device Admin	Operation Mod	le
• Device Admin	Connection Mode	TCP SERVER -
<u>System Status</u>	Connection Port Number	50000
Backup & Restore	Remote Host IP Address (For Client Only)	0.0.0
<u>Upgrade Firmware</u>		JACK
• <u>Ping</u>		



IV > Web Function Instruction

♦ One Page Quick Setup

Pt.	One Page Quick Set	up (Fixed IP)
RE //20	IP Address	192 . 168 . 168 . 125
Main Menu	Subnet mask	255 .255 .0
 One Page Setup 	Gateway	192 . 168 . 168 . 254
Advanced Setup	Primary DNS	168 .95 .1 .1
Operation Mode	Serial Port M	ode
 Serial Type 	Serial Type	RS232 -
<u>Dynamic DNS</u>	Baud Rate	19200 -
Management	Operation Mo	ode
<u>Device Admin</u>	Connection Mode	TCP SERVER -
<u>System Status</u>	Connection Port Number	50000
• Backup & Restore	Remote Host IP Address (For Client Only)	0.0.0
• <u>Upgrade Firmware</u>		BACK
• Ping	-	

• Function instruction of STATIC IP

Function	Description
IP Address	Set the IP address of the BF-430 [,] default setting is 192.168.168.125
Subnet mask	Set the subnet mask of the BF-430 [,] default setting is 255.255.255.0
Gateway	Set the gateway of the BF-430 , default setting is 192.168.168.254
Primary DNS	Set the DNS of the BF-430 , default setting is 168.95.1.1
	Serial Port Mode
Serial Type	Set the serial type, RS232 and RS485 for setting , default setting is
contai type	RS232
	1.Set serial port baud rate, the parameters can be selected : 1200 - 2400 -
Baud Rate	4800、9600、19200、38400、57600、115200、230400 and Others
Dadu Nale	2.After selecting Others , fill custom baud rate into the user defined
	3.Default setting is 19200
	Operation Mode
	There are 4 modes to set into connection mode, such as :
	TCP Server
Connection Mode	TCP Client
	UDP Server
	UDP Client
Connection Port Number	Set BF-430 connection port number, default setting is 50000
Remote Host IP Address	1.Set the remote host IP address, the default setting is 0.0.0.0
(For Client Only)	2.For Client Only



	One Page Quick Setup (DHCP Client)		
	TYPE: DHCP CLIENT -		
BF-430	Host Name (optional)	СНІУЛ	
Main Menu	Serial Port Mode		
 <u>One Page Setup</u> 	Serial Type	RS232 -	
Advanced Setup		19200 -	
<u>Operation Mode</u>	Baud Rate	0 (User Defined)	
 <u>Serial Type</u> 	Operation Mode		
<u>Dynamic DNS</u>	Connection Mode	TCP SERVER -	
Management	Connection Port Number	50000	
• <u>Device Admin</u>	Remote Host IP Address (For Client Only)	0.0.0.0	
• <u>System Status</u>	APPLY CANCEL BACK		
<u>Backup & Restore</u>			
• Upgrade Firmware			
• <u>Ping</u>			
•			
Function instructi	ion of DHCP CLIENT		

Function instruction of DHCP CLIENT

Function	Description	
Host Name (optional)	Fill in the host name , default setting is CHIYU (optional)	
	Serial Port Mode	
Serial Type	Set the serial type, RS232 and RS485 for setting , default setting is RS232	
	1.Set serial port baud rate, the parameters can be selected : 1200 .	
	2400、4800、9600、19200、38400、57600、115200、230400 and	
Baud Rate	Others	
	2.After selecting Others , fill custom baud rate into the user defined	
	3.Default setting is 19200	
Operation Mode		
	There are 4 modes to set into connection mode, such as :	
	TCP Server	
Connection Mode	TCP Client	
	UDP Server	
	UDP Client	
Connection Port Number	Set BF-430 connection port number, default setting is 50000	
Remote Host IP Address	1.Set the remote host IP address, the default setting is 0.0.0.0	
(For Client Only)	2.For Client Only	



One Page Quick Setup (PPPoE)

ŶŁ i	One Page Quick Setup (PPPoE)		
	TYPE: PPPoE	•	
BF-430	User Name	(1 - 47)	
One Page Setup	Password	(1 - 35)	
Advanced Between	Service Name (optional)	(1 - 47)	
Operation Mode	Close Connection when Idle Time Over	0 (seconds)	
- Covid Turns	PPPoE with Fixed IP Address	DISABLE -	
	Serial Port Mode		
 <u>Dynamic DNS</u> 	Serial Type	R5232 -	
Management		19200 -	
<u>Device Admin</u>	Baud Rate	0 (User Defined)	
<u>System Status</u>	Operation	Operation Mode	
<u>Backup & Restore</u>	Connection Mode	TCP SERVER -	
• <u>Upgrade Firmware</u>	Connection Port Number	50000	
	Remote Host IP Address (For Client Only)	0.0.0	
• <u>Ping</u>			
T	APPLY CANCE	EL BACK	

Function instruction of PPPoE (D

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	 Default setting is 0 second, the range is from 0 ~ 4294967295
Idle Time Over	• Keep the connection of BF-430 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	 After selecting ENABLE, fill in fixed IP
Address	Default setting is DISABLE
///////////////////////////////////////	• optional
	Serial Port Mode
Serial Type	Set the serial type, RS232 and RS485 for setting , default setting is
	RS232
	1.Set serial port baud rate, the parameters can be selected : 1200 .
	2400、4800、9600、19200、38400、57600、115200、230400 and
Baud Rate	Others
	2.After selecting Others , fill custom baud rate into the user defined
	3.Default setting is 19200
	Operation Mode
	There are 4 modes to set into connection mode, such as :
	TCP Server
Connection Mode	TCP Client
	• UDP Server
	UDP Client
Connection Port Number	Set BF-430 connection port number, default setting is 50000
Remote Host IP Address	1.Set the remote host IP address, the default setting is 0.0.0.0
(For Client Only)	2.For Client Only



Advanced Setup

1 • Operation Mode Setup

(1)TCP Server

Pt,	Operation Mode Setup (TCP Server)	
BF-430	Local Listen Port Number	50000
Main Menu • <u>One Page Setup</u>	Close Connection When Remote Idle	100 (seconds)
Advanced Setup	Access Password	(maxien 31)
 Operation Mode 	Keep Alive Check	🖲 Disable 🔿 Enable
	Max TCP Connection	1 -
 <u>Serial Type</u> 	Real COM	ENABLE
 <u>Dynamic DNS</u> 	E	
Management		
• <u>Device Admin</u>		
<u>System Status</u>		
• Backup & Restore		
Upgrade Firmware		

• Function instruction

• <u>Ping</u>

Function	Description
Local Listen Port Number	 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	 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 BF-430 connect with monitoring side or the connection will be off automatically when remote idle.
Access Password	 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	 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 BF-430 with VCOM to send each other RTS / CTS, DTR / DSR signal, this option must be checked



(2)TCP Client

R	Operation Mode Setup (TCP Client)	
BF-430	Remote Connection Port Number	50000 (0 - 65535)
Main Menu One Page Setup	Remote Host IP Address	0.0.0
	TCP Connection	Start Up Any Character
Advanced Setup		APPLY CANCEL BACK
 <u>Operation Mode</u> 		
<u>Serial Type</u>		
 <u>Dynamic DNS</u> 		
Management		
<u>Device Admin</u>		
System Status		
<u>- System Status</u>		
<u>Backup & Restore</u>		
Upgrade Firmware		
<u>opproduct manade</u>		
• Ping		
•		
Function instruct	ion	

Function	Description
Pamata Connection Port Number	Set the remote connection port number , the range is 0 \sim
Remote Connection Fort Number	65535 · default setting is 50000
Remote Host IP Address	Set remote host IP address , default setting is 0.0.0.0
	There are 2 modes to set TCP connection to server :
	1.Start Up : This mode means when BF-430 enable, it will
	build the TCP connection with SERVER immediately. It
	will automatically build the TCP connection after disable
TCP Connection	and then re-connect again.
	2.Any Character : This mode means only when BF-430
	receives data from RS232/485, it will build TCP
	connection with SERVER. TCP connection will be disable
	if not receiving the data from RS232/485.



(3)UDP Server

	Оре	ration Mode Setup (UDP Server)	
ТМ		MODE: UDP SERVER -	
BF-430	Local Listen Port Number	50000 (0 - 65535)	
Main Menu			
 <u>One Page Setup</u> 		APPLY CANCE BACK	
Advanced Setup			
 Operation Mode 			
 <u>Serial Type</u> 			
■ <u>Dynamic DNS</u> ■			
Management			
<u>Device Admin</u>			
<u>System Status</u>			
<u>Backup & Restore</u>			
• Upgrade Firmware			
• Ping			
•			
Function instruct	tion		

Function	Description
Local Listen Port Number	 If data transmit thru UDP remote command, must select Serial Server Mode into UDP SERVER and set LISTEN PORT NUMBER into the same value with monitoring side. Default setting is 50000



(4)UDP Client

ب	Operation Mode Setup (UDP Client)		
BF-430	Remote Connection Port Number	5000	0 (0 - 65535)
Main Menu • <u>One Page Setup</u>	Remote Host IP Address	0	.0.0.0
Advanced Setup		APPLY CANCE	L BACK
Operation Mode			
<u>Serial Type</u>			
<u>Dynamic DNS</u>	÷		
<u>Device Admin</u>			
<u>System Status</u>			
<u>Backup & Restore</u>			
<u>Upgrade Firmware</u>			
• Ping			
Function instru	iction		

Function	Description
Demote Connection Dart Number	Set the remote connection port number , the range is 0 ~
Remote Connection Port Number	65535 , default setting is 50000
Remote Host IP Address	Set the remote host IP address, the default setting is 0.0.0.0





2 · Serial Port Setup

Eyt 1	Serial P	ort Setup	
	Serial Type	R5232 -	
BF-430	Baud Rate	19200 -	
матп мепи		0 (User Defined)	
 <u>One Page Setup</u> 	Data Bits	8 -	
Advanced Setup	Parity Check	None -	
 Operation Mode 	Stop Bits		
 <u>Serial Type</u> 	Flow Control	None -	
 <u>Dynamic DNS</u> 	Force Packet Transmit Time	0 (0 - 65535)ms	
Management	Force Packet Transmit Length	0 (0 - 65535)bytes	
<u>Device Admin</u>	Delimiter 1	0x 00 (HEX) © Enable ® Disable	
• <u>System Status</u>	Delimiter 2	0x 00 (HEX) © Enable © Disable	
<u>Backup & Restore</u>	RS485 Transmission Delay Time	0 (0 - 65535)us Note: for RS485 only	
Upgrade Firmware	APPLY C	ANCEL BACK	

Function instruction •

+

< _____

• <u>Ping</u>

• Function instruction	
Function	Description
Serial Type	Set the serial type, RS232 and RS485 for setting , default setting is RS232
Baud Rate	 Set serial port baud rate, the parameters can be selected : 1200 × 2400 × 4800 × 9600 × 19200 × 38400 × 57600 × 115200 × 230400 and Others After selecting Others, fill custom baud rate into the user defined Default setting is 19200
Data Bits	Set the data bits , 5,6,7,8 parameters can be selected, default setting is 8
Parity Check	 Set the parity check · 4 parameters can be selected : 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	Set the flow control , 2 parameters can be selected : • Xon/Xoff : Software flow control • CTS/RTS : Hardware flow control • Default setting is None
Force Packet Transmit Time (ms)	 Force packet transmit time The minimum setting is 0 ms of setting serial interval between data. Default setting is 0, the range is 0~65535ms
Force Packet Transmit Length (bytes)	 Force packet transmit length. The serial set length of data transmission range is from 0~ 65535 bytes, the default setting is 0
Delimiter 1	 Set the transmission data end by identified delimiter and if your transmission data includes the identified delimiter, BF-430 will send out packet at once. Default setting is disabled. The range is from 0x00 ~ 0xFF
Delimiter 2	 Set the transmission data end by identified delimiter and if your transmission data includes the identified delimiter, BF-430 will send out packet at once. Default setting is disabled. The range is from 0x00 ~ 0xFF
RS485 Transmission Delay	Set the RS485 transmission delay time, range is $0 \sim 65535$ us, the default setting is 0



3 • DDNS Setup

(1)TZ0

Pt.	DDNS Services: 120	
BF-430	Email Address:	(maximum 47)
Main Menu • <u>One Page Setup</u>	Password key:	(maximum 31)
Advanced Setup	Device DNS Name:	(ex.
Operation Mode Serial Type		hostname.tzo.com)
<u>Dynamic DNS</u>	Registry IP Address : ≡	192.168.168.125
Management	Status ·	DDNS function is disabled
<u>Device Admin</u>		
Backup & Restore		
• <u>Upgrade Firmware</u>		
• <u>Ping</u>		
- III - F		
Function instruction	on	

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
Pogistry IP Addross	Display the registry IP address - when DDNS is enabled, It will show the
Registry IF Address	registry IP address
Statua	Display DNS Serve status , when DDNS server does not enable ,it will show
Sialus	"DDNS function is disabled"



(2) Dyndns

₽t.	DDNS Services: Dyndns		
BF-430	Username:	m)	1aximum 31)
<u>One Page Setup</u>	Password:	(ma	ximum 31)
Advanced Setup Operation Mode 	Device DNS Name:	hostname.dyndns.org)	(ex.
Serial Type	Registry IP Address :	0.0.0.0	
<u>Dynamic DNS</u> Mana gement			
<u>Device Admin</u>	Status :	DDNS function is disabled	
System Status		APPLY CANCEL BACK	
Backup & Restore			
Upgrade Firmware			
• <u>Ping</u>			
<)			

Function instruction •

 \mathbf{Y}

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	
Degistry ID Address	Display the registry IP address , when DDNS is enabled, It will show the	
Registry IP Address	registry IP address	
Statua	Display DNS Serve status , when DDNS server does not enable ,it will show	
Sidius	"DDNS function is disabled"	



♦ Management

1 · Device Administration Setting

í í	Dev	ice Administration Setting	
BF-430 Main Menu • <u>One Page Setup</u> Advanced Setup	Block Standard Http Port(80) Management Device Management IP Address Device Hostname Device Location	UNBLOCK BLOCK 192 .168 .200 .200 CHIYU	APPLY
Operation Mode	· · · · · · · · · · · · · · · · · · ·	User Name	
■ <u>Serial Type</u>		Password Change	
<u>Dynamic DNS</u>	Administrator Password	Password Contirm	APPLY
Management			
<u>Device Admin</u>	Block Ping Request		APPLY
<u>System Status</u>	MAC Address Change	00 :00 :00 :00 :00	APPLY
<u>Backup & Restore</u>	Reset System to Factory Default	TORY DEFAULT	
<u>Upgrade Firmware</u>	Reboot System REBOOT		
• <u>Ping</u>		BACK	
Function instruction			

Function	Description
	 Select unblock or block standard http port [,] default setting is
Block Standard Http	UNBLOCK(80)
Port(80) Management	• If other port sequence has to be set, select BLOCK, and then fill in the
	port sequence.
Device Management IP	Display and set the device management IP address , default setting is
Address	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
	 User Name : Fill in the user name
Administrator Decoverd	 Password Change : Change the password, for security reasons,
Auministrator Passworu	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
	If you want to change the MAC address, fill in the new MAC
MAC Address Change	address
Reset System to Factory	Execute this function will reset system to factory default
Default	
Reboot System	Execute this function will reboot system



2 • System Status Monitor

Pt	
BF-430	
Main Menu	
 <u>One Page Setup</u> 	
Advanced Setup	
 <u>Operation Mode</u> 	
 <u>Serial Type</u> 	
 <u>Dynamic DNS</u> 	
Management	
• <u>Device Admin</u>	
<u>System Status</u>	
<u>Backup & Restore</u>	
• <u>Upgrade Firmware</u>	
• <u>Ping</u>	
< <u> </u>	

BF-430 Status Monitor

System Status		
Product Name:	BF430 232/485 TCP/IP Converter	
Firmware Version:	1.13.00,Apr 4 2011	
System Up Time:	System Up Time: 2H:30M:31S	
Ethernet Status		
IP Configuration Mode:	STATIC IP	
Operation Mode:	TCF	P SERVER
Connection Port:		50000
MAC Address:	00:0e	:e3:01:36:46
IP Address:	192.	168.168.125
Subnet mask:	255	.255.255.0
Default Gateway:	192.	168.168.254
Primary DNS:	168.95.1.1	
STATUS:	Up	
Serial Status		
Serial	Status	
Serial Serial Type:	Status	R\$232
Serial Serial Type: Baud Rate:	Status	R S232 19200
Serial Serial Type: Baud Rate: Data Bits:	Status	R S232 19200 8
Serial Serial Type: Baud Rate: Data Bits: Parity Check:	Status	R S232 19200 8 none
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits:	Status	RS232 19200 8 none 1
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control:	Status	R S232 19200 8 none 1 None
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Sta	Status	R S232 19200 8 none 1 None
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Sta	Status St	R S232 19200 8 none 1 None 118152 bytes
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Sta Ethernet :	Status Status tistic TX Bytes: TX Packets:	R \$232 19200 8 none 1 None 118152 bytes 204 packets
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Star Ethernet :	Status Status tistic TX Bytes: TX Packets: RX Bytes:	R \$232 19200 8 none 1 None 118152 bytes 204 packets 9999445 bytes
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Sta Ethernet :	Status Listic TX Bytes: TX Packets: RX Bytes: RX Packets:	R S232 19200 8 none 1 None 118152 bytes 204 packets 9999445 bytes 106201 packets
Serial Serial Type: Baud Rate: Data Bits: Parity Check: Stop Bits: Flow Control: Sta Ethernet :	Status St	R S232 19200 8 none 1 None 118152 bytes 204 packets 9999445 bytes 106201 packets 0 bytes

Function	Description	
Product Name	Display the product name : BF-430 232/485 TCP/IP Converter	
Firmware Version	Display the firmware version : 1,13,00 Apr 4 2011	
System Up Time	Display system up time , the sequence is hour/minute/second	
	Ethernet Status	
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	
MAC Address	Display the MAC address of BF-430	
IP Address	Display BF-430 address, default setting is 192.168.168.125	
Subnet mask	Display BF-430 Subnet mask, default setting is 255.255.255.0	
Default Gateway	Display BF-430 Default Gateway, default setting is 192.168.168.254	
Primary DNS	Display BF-430 Primary DNS address, default setting is 168.95.1.1	
STATUS	Display BF-430 internet status	
Serial Status		
Serial Type	Display Serial type, default setting is RS232	
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	
Statistic		
Ethernet	RX / TX bytes and RX / TX packets 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 • Backup & Restore Configuration

L Contraction of the second se	Backup & Restore Configuration
L ÅF	Backup
BF-430	
Main Menu	Restore
<u>One Page Setup</u>	Please select a configuration file to restore: 图题
Advanced Setup	Restore
 <u>Operation Mode</u> 	BACK
 <u>Serial Type</u> 	
<u>Dynamic DNS</u>	
Management	
• <u>Device Admin</u>	
<u>System Status</u>	
<u>Backup & Restore</u>	
Upgrade Firmware	
• <u>Ping</u>	

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



4 • Firmware Upgrade

	Firn	nware Upgrade	
	Warning: Upg	grade must NOT be interrupted	
BF-430	Please select a file to upgrade	演覽	UPGRADE
Main Menu			
 <u>One Page Setup</u> 			
Advanced Setup			
<u>Operation Mode</u>			
 <u>Serial Type</u> 		BACK	
■ <u>Dynamic DNS</u> ≡			
Management			
Device Admin			
<u>System Status</u>			
Backup & Restore			
<u>Upgrade Firmware</u>			
• Ping			
•			
<			
Function instruction	on		

Function	Description	
	 Browse and select firmware, execute Upgrade to upgrade firmware 	
Please select a file to	 Has to assure the possibility of power supply during the process of 	
upgrade	upgrading, or severe damage will be caused. What if upgrade different	
	firmware to different products, and it will also cause severe damage.	



5 · PING

	-
Pt	
BF-430	
Main Menu	
<u>One Page Setup</u>	
Advanced Setup	
<u>Operation Mode</u>	
 <u>Serial Type</u> 	E
Dynamic DNS	
Management	
• <u>Device Admin</u>	
<u>System Status</u>	
<u>Backup & Restore</u>	
• <u>Upgrade Firmware</u>	
• Ping	
•	r

Networking Diagnostic (PING)

Source IP Address :	192.168.168.125
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 BF-430 IP address			
Destination IP Address	Input IP address of Remote Host			
Packet Number	Set up the number of PING package, ranged 1 \sim 4, the default 4			
Ping Size	Set up the size of PING package, the utmost setting 1460 bytes .			
Ding Deput	Display Sent Request data			
Ping Result	 Display Receive Reply data 			