



BF-450(M)/BF-430/BF-431

RS232/RS485/RS422 to TCP/IP Converter Module

Quick Start Guide

2003



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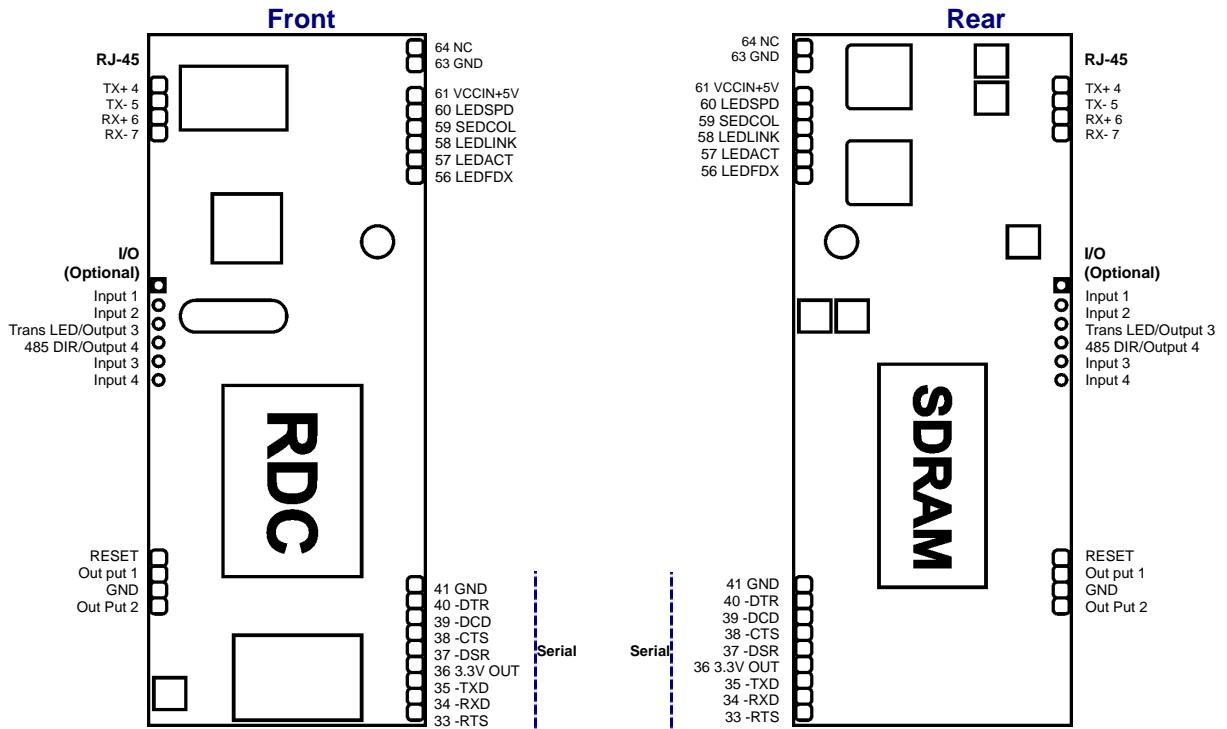
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1. Hardware Installation

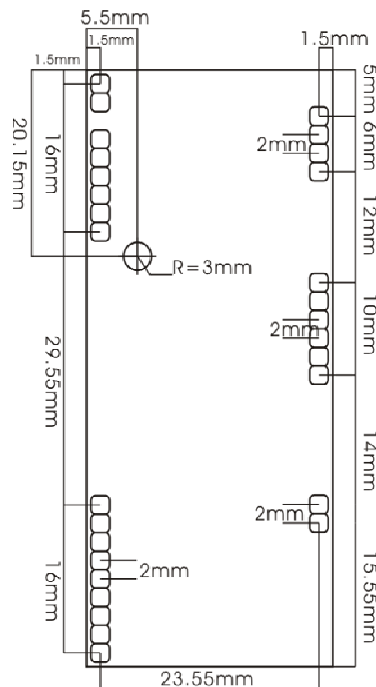
Socket Type



L=65mm, D=26mm, H=7mm

RS232 Pin Form		
Pin	Acronym	Sense
Pin 1	CD	Carrier Detect
Pin 2	RXD	Receive
Pin 3	TXD	Transmit
Pin 4	DTR	Data Terminal Ready
Pin 5	GND	Ground
Pin 6	DSR	Data Set Ready
Pin 7	RTS	Request to Send
Pin 8	CTS	Clear to Send
Pin 9	RI	Ring Indicator

Mechanical Dimensions (mm) :



2. Setting up Your Computer's IP Address

Use this section to set up your computer to assign it a static IP address in the 192.168.168.1 to 192.168.168.254 (except for 192.168.168.125) range with a subnet mask of 255.255.255.0. This is necessary to ensure that your computer can communicate with your BF-450(M)/BF-430/BF-431.

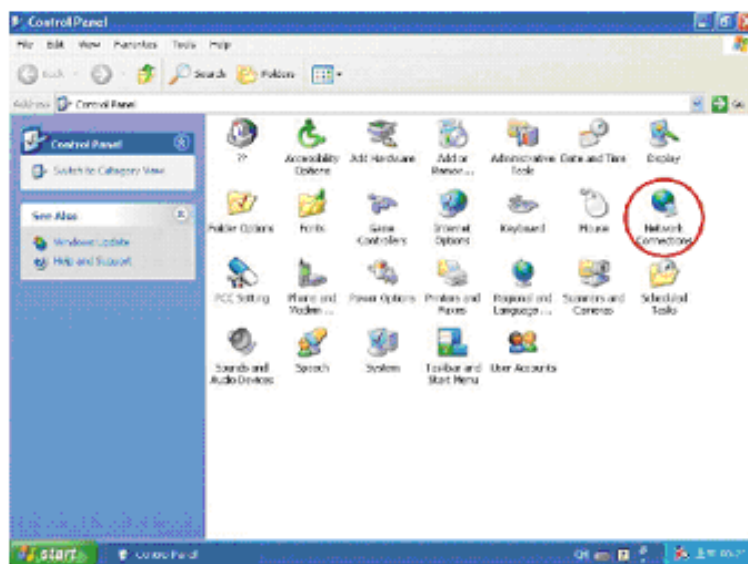
Your computer must have an Ethernet card and TCP/IP installed. TCP/IP should already be installed on computer using Windows 98/2000/XP and later operating systems.

Note: Connect a computer to BF-450(M)/BF-430/BF-431 Ethernet port directly should be with crossover Ethernet cable, if both connect to hub/switch should be with straight-through Ethernet cable.

2.1 Installing the TCP/IP Protocol

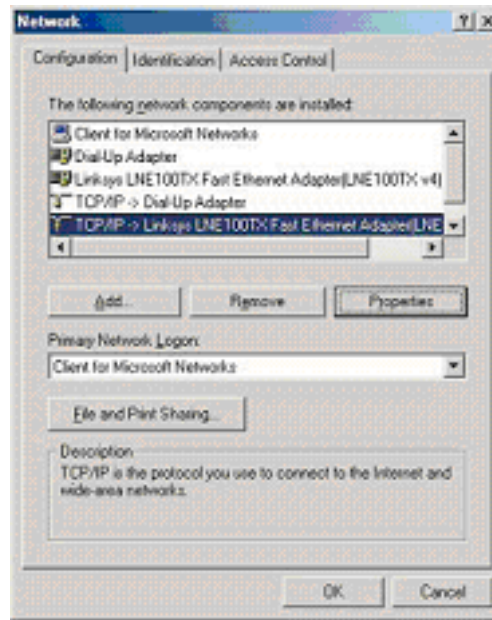
If you are not sure whether the TCP/IP Protocol has been installed, follow these steps to check, and if necessary, install TCP/IP onto your PCs.

1. Click the **"Start"** button. Choose **"Settings"**, then **"Control Panel"**. Double-click the **"Network Connections"** icon. Your Network window should appear as follows:



2. For Windows 98 and Millennium

On the “**Configuration**” tab (if using **Windows 98 and Millennium PCs**), select the **TCP/IP** line for the applicable Ethernet adapter. Do not choose a TCP/IP entry whose name mentions PPPoE, VPN. If the word **TCP/IP** appears by itself, select that line. Click the **Properties** button.

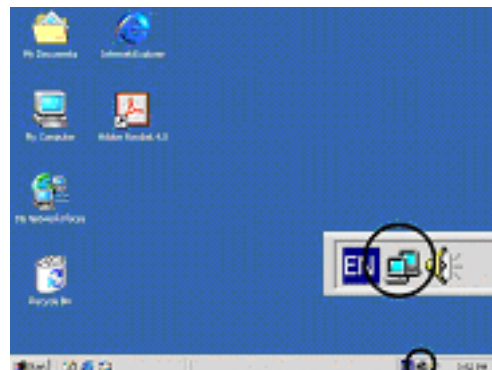


Important:

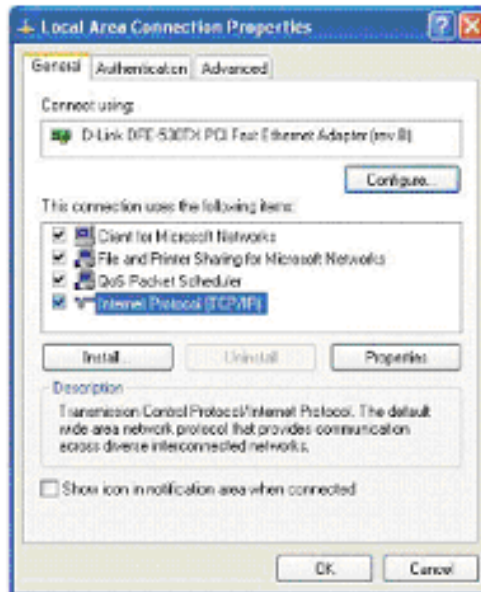
For Windows 2000 & Windows XP Setting, you will find that they differ with Windows 98/ME/NT slightly. See the following for reference.

For Windows XP and Windows 2000

Click the “**Local Area Connection**” icon on the lower right hand side of your desktop screen.



In the “**Local Area Connection Status**” window, click the “**Properties**” button then your Network window will appear.

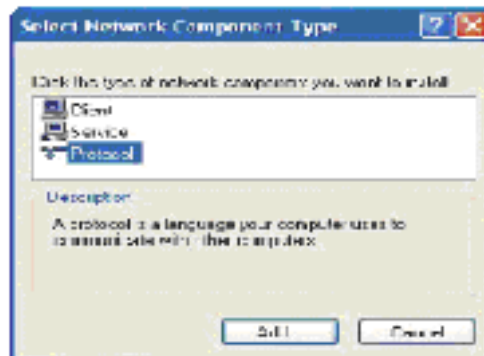


There are two tabs, “**General**” ”**Support**”, in the Network window.

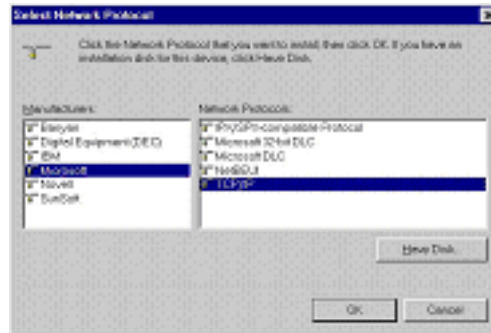
3. Check whether the TCP/IP Protocol has already been installed onto your computer’s Ethernet card. Note that TCP/IP Protocol can be installed for a computer’s Dial-Up Adapter as well as for the Ethernet card.

- If yes, go to section 2.2.
- If no, click the “**Install**” button.

4. Double-click “**Protocol**” in the Select Network Component Type or highlight “**Protocol**” then click “**Add**”.



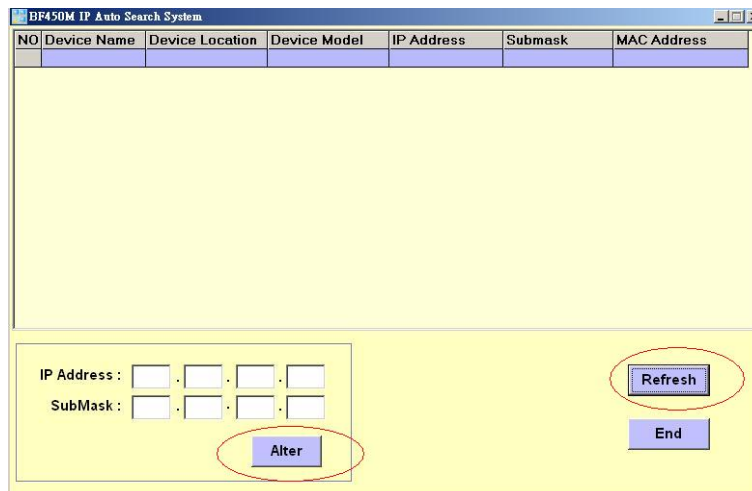
5. Highlight **“Microsoft”** under the list of manufacturers. Double-click **“TCP/IP”** from the list on the right or highlight **“TCP/IP”** then click **“OK”** to install TCP/IP.



6. After a few seconds, you will be returned to the Network window. The TCP/IP Protocol should now be on the list of installed network components (see 3 above).

2.2 Using IP Search Utility to set BF450(M)/BF430/BF431’s IP Addresses

1. Install IP Search utility on your computer and execute **ipsearch.exe**.
2. Clicks **Refresh** to find the IP address of your BF450(M)/BF430/BF-431.
3. If the current setting of IP address is not in same sub network with yours, then you can change BF450(M)/BF430/BF-431’s IP address and Subnet Mask by click **Alter**.



2.3 Fixed IP Addresses Configuration

For Windows 98 and Millennium

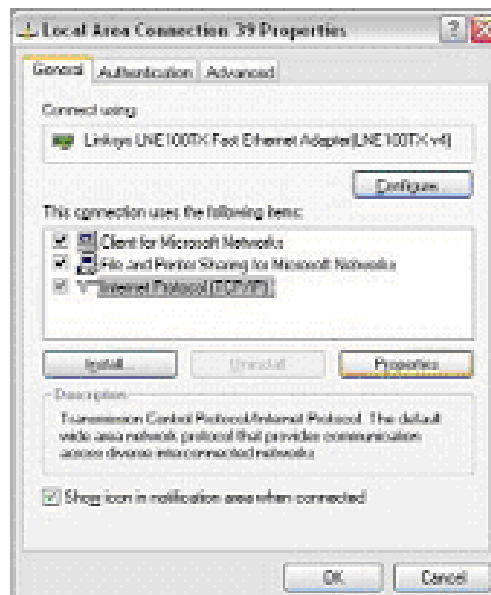
1. To set up computers with fixed IP Addresses, click the **“Properties”** button. The TCP/IP Properties window consists of several tabs. Choose the **“IP Address”** tab as shown below.

2. Select **“Specify an IP address”** and enter **“192.168.168.xxx”** (the default value of 450(M)/BF-430/BF-431 is 192.168.168.125) in the **“IP Address”** location (where xxx is a number between 1 and 254 used by the High-Performance BF-450(M)/BF-430/BF-431 to identify each computer), and the default **“Subnet Mask”** **“255.255.255.0”**. Note that no two computers on the same LAN can have the same IP address.

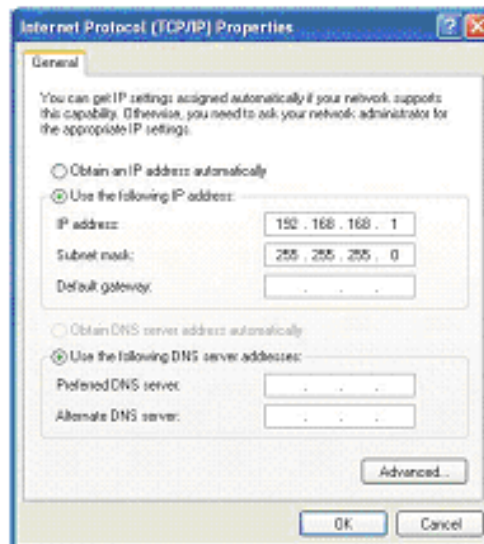


For Windows XP and Windows 2000

1. Make sure the box next to Internet Protocol (TCP/IP) is checked. Highlight **Internet Protocol (TCP/IP)**, and click the **Properties** button



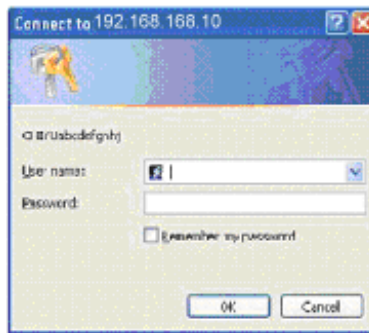
2. Select **“Specify an IP address”** and enter **“192.168.168.xxx”** (the default value of 450(M)/BF-430/BF-431 is 192.168.168.125) in the **“IP Address”** location (where xxx is a number between 1 and 254 used by the High-Performance BF-450(M)/BF-430/BF-431 to identify each computer), and the default **“Subnet Mask”** **“255.255.255.0”**. Note that no two computers on the same LAN can have the same IP address.



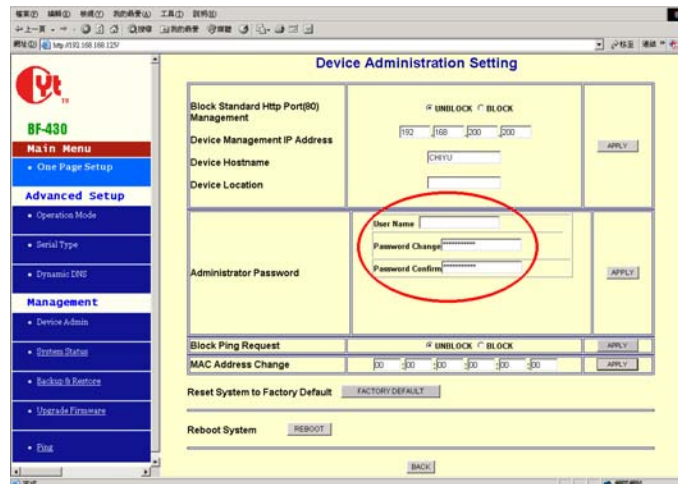
Click **“OK”** to complete the TCP/IP installation.

3. Configure your BF-450(M)/BF-430/BF-431

1. Open your web browser and type <http://192.168.168.125> in the browser's *address box*. This address is the factory set IP Address of your BF-450(M)/BF-430/BF-431. Press **“Enter”**.
2. The **“Username and Password required”** prompt box will appear. Typing **“admin”** (default username) in the Username field and typing **“admin”** (default password) in the Password field. Click **“OK”**. The setup screen will then appear.



3. It is highly recommended you change the default username and password when you login successfully first time.





4. Troubleshooting

PROBLEM	CORRECTIVE ACTION
None of the LEDs turn on when you turn on the BF-450(M) / BF-430 / BF-431	<p>Make sure that you have correct power connected to BF-450(M) / BF-430 / BF-431 and plugged in to an appropriate power source. Check all cables connections.</p> <p>If the LEDs still do not turn on, you may have a hardware problem. In this case, you should contact your local vendor.</p>
Can not access BF-450(M) / BF-430 / BF-431 from Ethernet	Check cable connection between BF-450(M) / BF-430 / BF-431 and computer or hub. Ping BF-450(M) / BF-430 / BF-431 from computer. Make sure your computer Ethernet card is installed and functioning properly.
Can not ping any computer on the LAN	<p>If the 10/100M LED are off, check the cable connection between BF-450(M) / BF-430 / BF-431 and your computer.</p> <p>Verify that the IP address and subnet mask of the BF-450(M) / BF-430 / BF-431 and computer are in the same IP address range.</p>
Can not access BF-450(M) / F-430 / BF-431 from Serial	<p>Check the Serial cable connection between BF-450(M) / BF-430 / BF-431 and your device.</p> <p>Verify that the BF-450(M) / BF-430 / BF-431 setting of Serial type is same as your device and make sure the hardware jumper is in the correction position.</p>



Appendix A. BF-450(M) / BF-430 / BF-431 Default Value Setting

Serial Working Mode	Default Value
Acting Role	TCP Server
Listen Port Number	50000
Idle Timeout to Close Connection	300 seconds
Access Password	NULL
IP Configuration	Default Value
IP Mode	Static IP
IP Address	192.168.168.125
Subnet Mask	255.255.255.0
Default Gateway	192.168.168.254
Primary DNS	168.95.1.1
Serial Configuration	Default Value
Serial Type	RS232
Baud Rate	115200
Parity Check	None
Data Bits	8
Stop Bits	1
Flow Control	None
Force Transmission Time	40 ms
Dynamic DNS	Default Value
DDNS Service	Disable
I/O Working Mode(BF-450 only)	Default Value
I/O Control Mode	AUTO
I/O State(BF-450 only)	Default Value
IN 1 Normal State	Open
IN 2 Normal State	Open
IN 3 Normal State	Open
OUT 1 Output Signal State	Short
OUT 2 Output Signal State	Short
OUT 3 Output Signal State	Short
OUT 1 Output Signal Hold Time	0 second
OUT 2 Output Signal Hold Time	0 second
OUT 3 Output Signal Hold Time	0 second
I/O Mapping Rule(BF-450 only)	Default Value
OUT 1 Triggered by	IN 1
OUT 2 Triggered by	IN 2
OUT 3 Triggered by	IN 3
Alarm Generation in OUT 1	Disable
Alarm Generation in OUT 2	Disable
Alarm Generation in OUT 3	Disable
E-Mail/SMS Alert(BF-450 only)	Default
E-Mail/SMS Service	Disable
Device Administration	Default
Block Http Standard Port 80	UNBlock
Manage IP Address	192.168.200.200
Device Name	"CHIYU"
Device Location	null
Login Username	"admin"
Login Password	"admin"
Block Ping Request	Unblock
Diagnostic PING	Default Value
PING Packet Numbers	4
PING Packet Length	60 Bytes