

R&D Technical Guide: BF430 Setup

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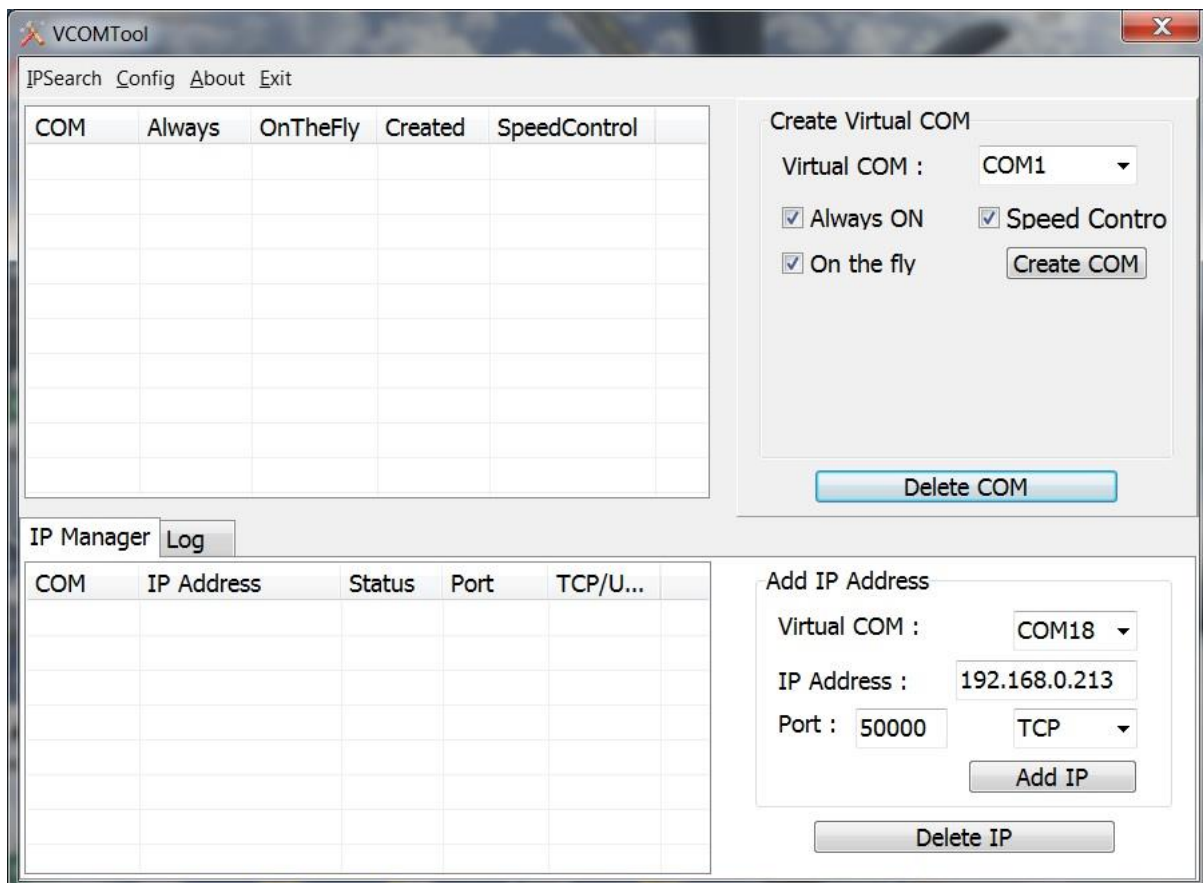
1) SYSTEM SETUP

Install the software '**VCOMToolSetup.exe**' from the link provided. Install all the drivers being asked for during the installation of this software. This software will act as the Virtual COM Port to connect to the BF430 using a normal COM Port instead of an IP Address. This software is configured only once and restarts automatically with Windows.

<https://www.gridconnect.com/products/industrial-serial-rs232-ethernet-rs485-converter-bf-430>

Select 'DOCUMENTS & DRIVERS' and download 'BF-430 Product CD'.

When installation is complete, open the software. The following is the main interface:

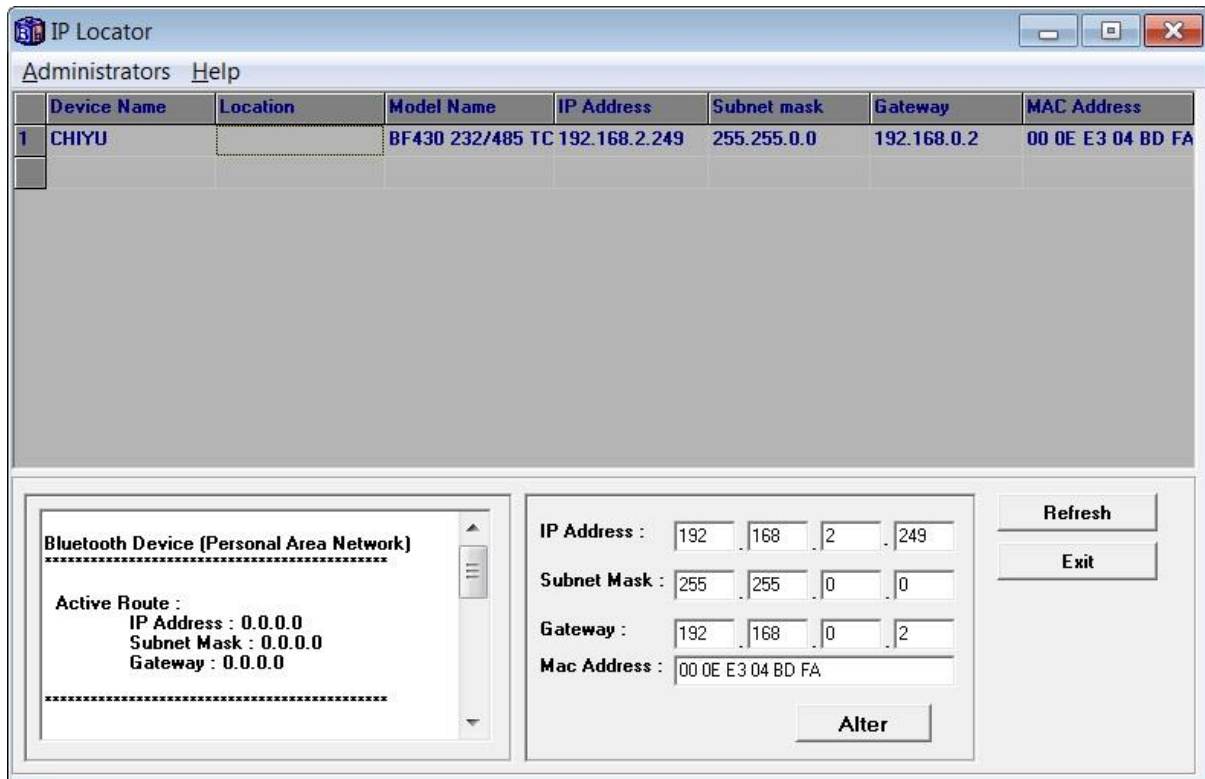


At this stage, connect the BF430 to the network, to perform a network search.

Select **IPSearch** in the VCOM tool to launch the **IP Locator** utility.

Select **Refresh** to find the unit on the network. The unit will be displayed in the available rows.

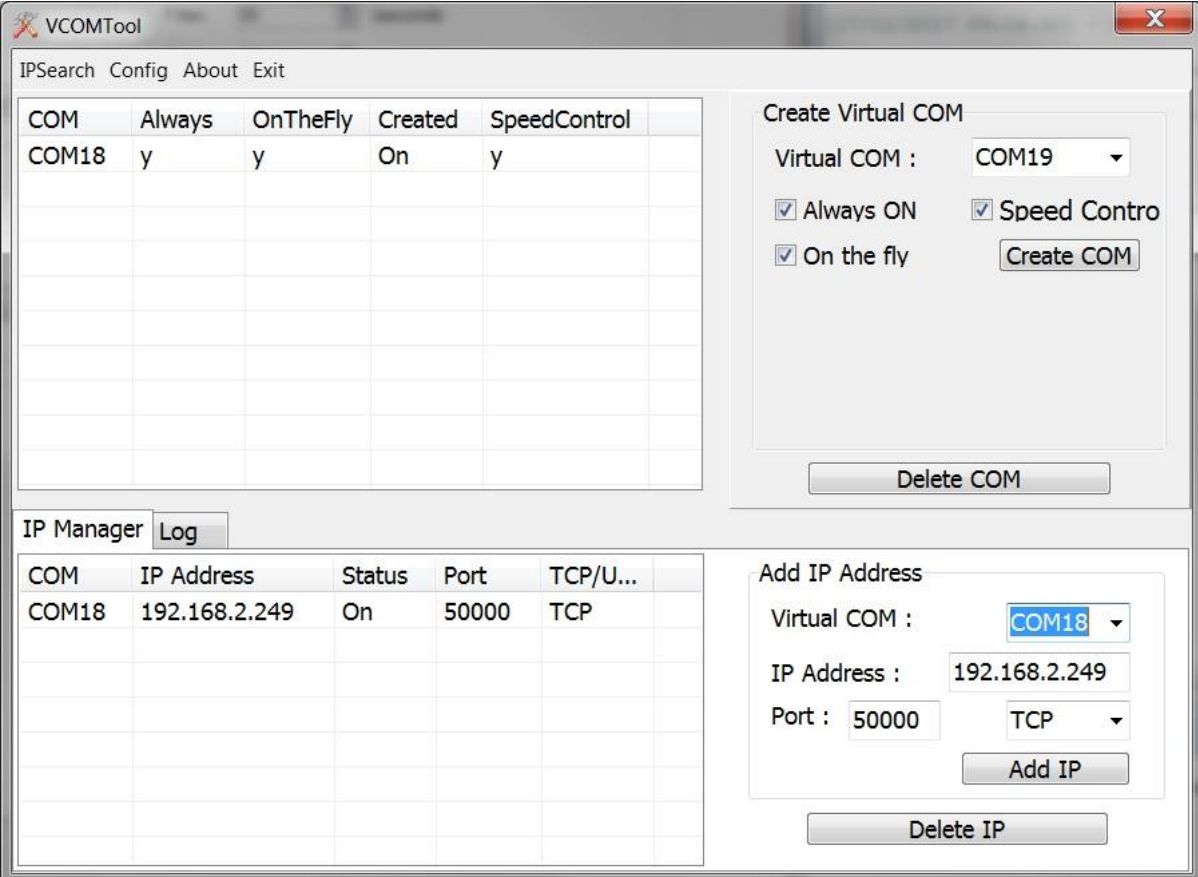
To change the unit parameters, click on the respective row, and modify the settings on the table below, then click **Alter**.



Use the VCOMTool, to create a Virtual COM and link it to an IP Address.

In the '**Create Virtual Com**' section, choose any COM number from the drop-down list and select **Create COM**. The newly created COM port will be displayed in the table on the left. Make sure that checkbox 'Always ON' is ticked so that connection is re-established automatically in case there is any network problems.

In the '**Add IP Address**' section, enter the respective IP Address of the BF430 in the **IP Address** textbox, the specific port which will be using in the **Port** textbox (in this case 50000) and select **TCP**. Select **Add IP** and the IP/COM port link will be included in the **IP Manager** table. Important that the BF430 must be switched ON with the respective IP Address.



The screenshot shows the VCOMTool application window. It features a menu bar (IPSearch, Config, About, Exit) and a main interface divided into several sections:

- Table 1 (Top Left):** A table with columns: COM, Always, OnTheFly, Created, SpeedControl. It contains one row: COM18, y, y, On, y.
- Create Virtual COM Section (Top Right):** Includes a dropdown for 'Virtual COM' (set to COM19), checkboxes for 'Always ON' (checked), 'Speed Control' (checked), and 'On the fly' (checked). A 'Create COM' button is present.
- IP Manager Section (Bottom Left):** Includes a 'Log' button and a table with columns: COM, IP Address, Status, Port, TCP/U... It contains one row: COM18, 192.168.2.249, On, 50000, TCP.
- Add IP Address Section (Bottom Right):** Includes a dropdown for 'Virtual COM' (set to COM18), text boxes for 'IP Address' (192.168.2.249) and 'Port' (50000), and a dropdown for protocol (set to TCP). An 'Add IP' button is present.

Open a web browser and connect to the unit using the IP Address. Check for the following parameters:

TYPE	STATIC IP (Drop down on top in the One Page Setup).
IP Address	Set according to the network
Subnet Mask	Set according to the network
Gateway	Set according to the network
Serial Type	RS232/RS485 (Also need to be set from a small switch on the BF430)
Baud Rate	Based on Application
Connection Mode	TCP SERVER
Connection Port Number	Based on Application

One Page Setup

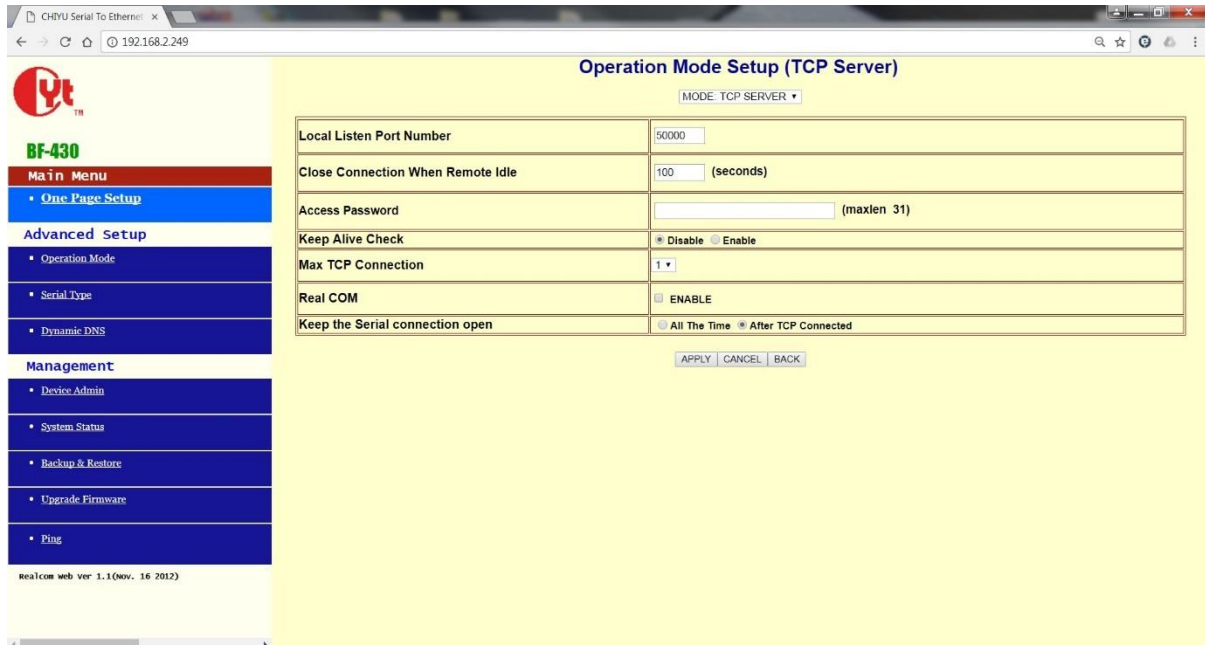


The screenshot shows the 'One Page Quick Setup (Fixed IP)' web interface. The browser address bar shows '192.168.2.249'. The interface includes a sidebar menu with 'Main Menu' (One Page Setup, Advanced Setup, Management) and 'Realcom web ver 1.1 (Nov. 16 2012)'. The main content area is titled 'One Page Quick Setup (Fixed IP)' and features a 'TYPE: STATIC IP' dropdown. The configuration fields are as follows:

IP Address	192 . 168 . 2 . 249
Subnet mask	255 . 255 . 0 . 0
Gateway	192 . 168 . 0 . 2
Primary DNS	168 . 95 . 1 . 1
Serial Port Mode	
Serial Type	RS232
Baud Rate	19200 (User Defined)
Operation Mode	
Connection Mode	TCP SERVER
Connection Port Number	50000
Remote Host IP Address (For Client Only)	0 . 0 . 0 . 0

Buttons at the bottom include 'APPLY', 'CANCEL', and 'BACK'.

The following pages does not need to be modified. They are just for reference only.



CHYU Serial To Ethernet x
192.168.2.249

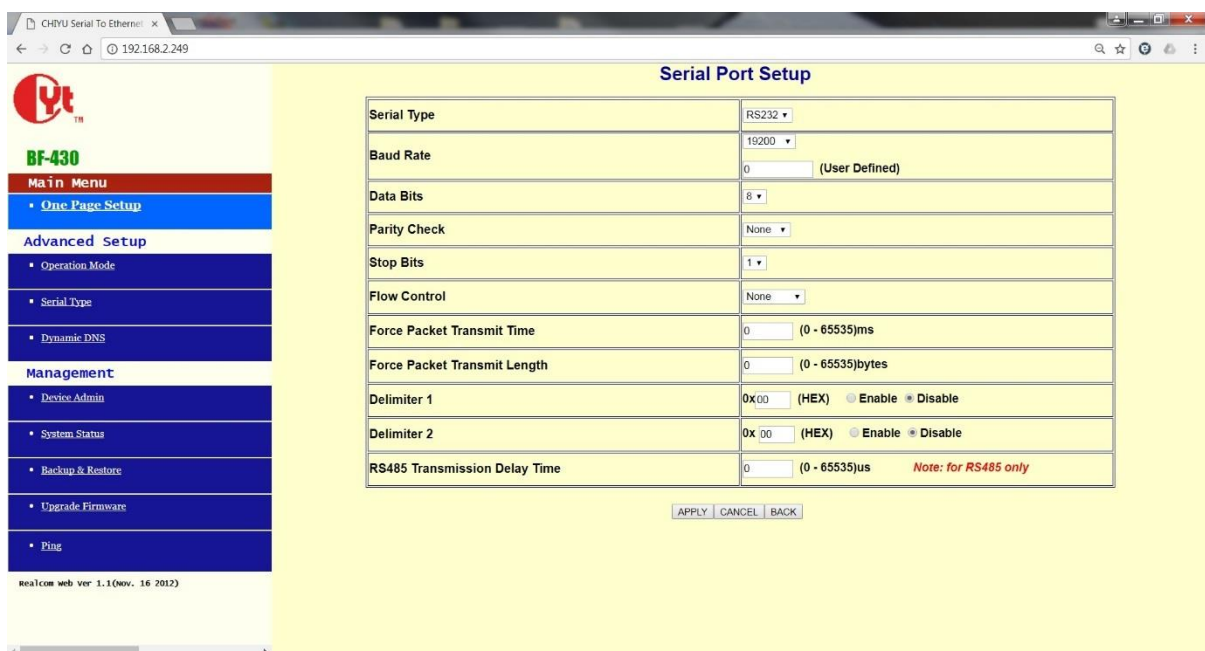
Operation Mode Setup (TCP Server)

MODE: TCP SERVER

Local Listen Port Number	50000
Close Connection When Remote Idle	100 (seconds)
Access Password	(maxlen 31)
Keep Alive Check	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Max TCP Connection	1
Real COM	<input type="checkbox"/> ENABLE
Keep the Serial connection open	<input type="radio"/> All The Time <input checked="" type="radio"/> After TCP Connected

APPLY CANCEL BACK

Yt
BF-430
Main Menu
One Page Setup
Advanced Setup
Operation Mode
Serial Type
Dynamic DNS
Management
Device Admin
System Status
Backup & Restore
Upgrade Firmware
Ping
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CHYU Serial To Ethernet x
192.168.2.249

Serial Port Setup

Serial Type	RS232
Baud Rate	19200 (User Defined)
Data Bits	8
Parity Check	None
Stop Bits	1
Flow Control	None
Force Packet Transmit Time	0 (0 - 65535)ms
Force Packet Transmit Length	0 (0 - 65535)bytes
Delimiter 1	0x00 (HEX) <input type="radio"/> Enable <input checked="" type="radio"/> Disable
Delimiter 2	0x00 (HEX) <input type="radio"/> Enable <input checked="" type="radio"/> Disable
RS485 Transmission Delay Time	0 (0 - 65535)us <i>Note: for RS485 only</i>


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Dynamic DNS
Management
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System Status
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Realcom web ver 1.1(Nov. 16 2012)



CHYU Serial To Ethernet | 192.168.2.249

BF-430 Status Monitor



BF-430

Main Menu

- One Page Setup

Advanced Setup

- Operation Mode
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- Dynamic DNS

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System Status	
Product Name:	BF430 232/485 TCP/IP Converter
Firmware Version:	1.16.00, Nov 16 2012
System Up Time:	0H:21M:40S
Ethernet Status	
IP Configuration Mode:	STATIC IP
Operation Mode:	TCP SERVER
Connection Port:	50000
MAC Address:	00:0e:e3:04:bd:f9
IP Address:	192.168.2.249
Subnet mask:	255.255.0.0
Default Gateway:	192.168.0.2
Primary DNS:	168.95.1.1
STATUS:	Up
Serial Status	
Serial Type:	RS232
Baud Rate:	19200
Data Bits:	8
Parity Check:	none
Stop Bits:	1
Flow Control:	None
Statistic	
Ethernet :	TX Bytes: 272974 bytes
	TX Packets: 2351 packets
	RX Bytes: 2714826 bytes
	RX Packets: 35064 packets
Serial:	TX Bytes: 8827 bytes
	RX Bytes: 20176 bytes

CHYU Serial To Ethernet | 192.168.2.249

Backup & Restore Configuration



BF-430

Main Menu

- One Page Setup

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Backup

Restore

Please select a configuration file to restore : No file chosen

CHYU Serial To Ethernet | 192.168.2.249


Firmware Upgrade

Warning: Upgrade must NOT be interrupted

Please select a file to upgrade

Choose File
No file chosen
UPGRADE

BACK



BF-430

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CHYU Serial To Ethernet | 192.168.2.249

Networking Diagnostic (PING)

Source IP Address :	192.168.2.249				
Destination IP Address :	0 . 0 . 0 . 0				
Packet Number :	4 (1 - 6)				
Packet Size :	60 (maximum 1460 Bytes)				
Ping Result :	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Sent Request:</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Receive Reply:</td> <td style="text-align: center;">0</td> </tr> </table>	Sent Request:	0	Receive Reply:	0
Sent Request:	0				
Receive Reply:	0				

PING CANCEL BACK



BF-430

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realcom web ver 1.1 (Nov. 16 2012)