



**Bulletin No:** SBX\_TT04142008\_KSU

**DATE:** April 14, 2008

**Application/Version:** LAN Administration/All

**TOPIC: KSU Administration via RJ-45 LAN Port**

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## Overview

SBX IP 320 provides multiple methods for administering the system, including via TCP/IP using its (included) Ethernet port.

## Connections

Vertical supports the following configuration methods for administering the system via the LAN port:

- **Direct connection using a crossover UTP cable - see next page**
- **Connection via Local Area Network using a straight UTP cable - see page 6**

### *IMPORTANT*

- **The LAN port on the KSU is a 10 Mbps Ethernet device. When connecting this port to a Local Area Network (LAN) switch, the port will auto-negotiate to 10 Mbps, half duplex.**
- **The BKSU's default IP address is 192.168.1.1**

## Direct Connection

The following procedure shows the connection made directly to the KSU via crossover patch cable, with no LAN switch

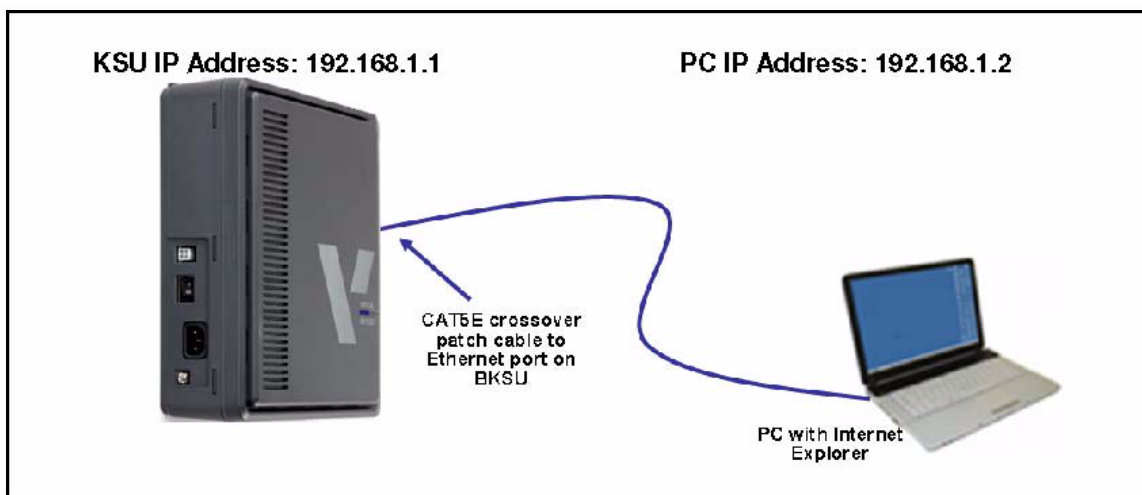
- 1) Set your PC's LAN port to the following settings:

**Speed: 10 Mbps**  
**Duplex: Half**  
**IP address: 192.168.1.2**  
**Subnet Mask: 255.255.255.0**  
**Default Gateway: leave blank**

**NOTE:** Your PC may auto-negotiate to 10 Mbps/Half duplex to match the KSU once connected. If it does, you don't need to make the speed and duplex settings shown above.

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- 2) Make sure that the KSU's LAN port is at its default configuration (**IP Address 192.168.1.1**)
- 3) Connect an Ethernet crossover cable directly between your PC and the KSU's LAN port as shown in the following diagram:

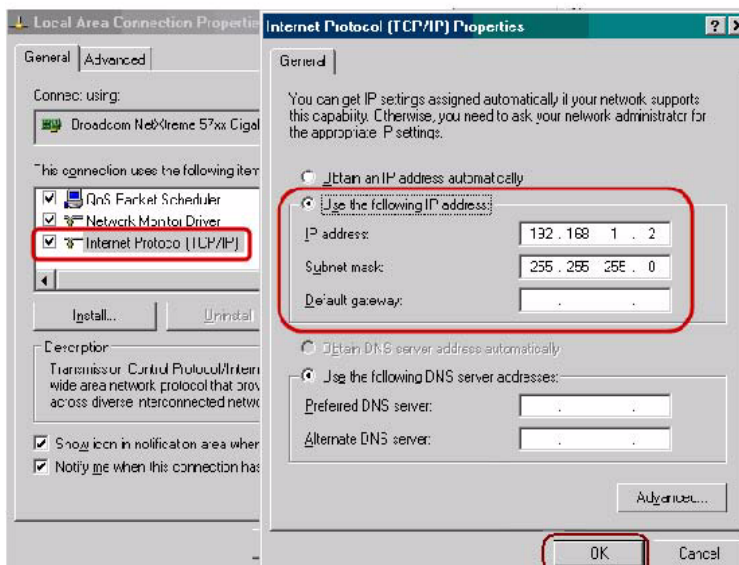
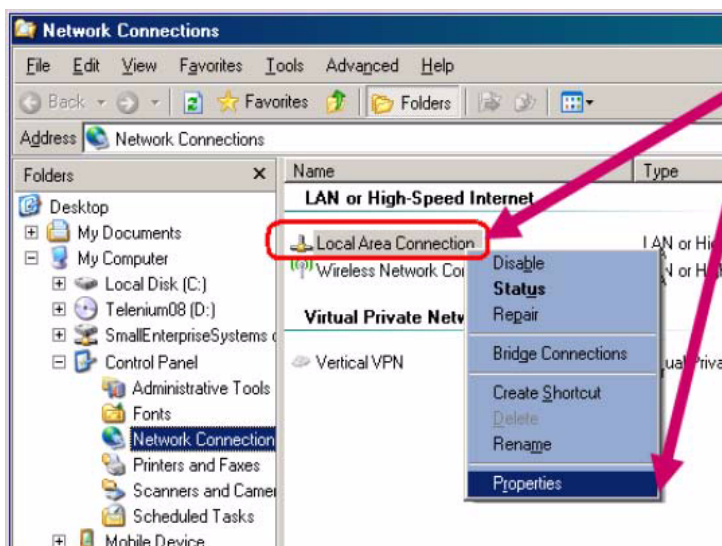


**Example Computer/LAN Setup**

The following procedure for setting up uses the example of a typical Windows™ PC running

Windows XP Professional®:

- 4) Open *Network Connections*.
- 5) Right-click the connection corresponding to the RJ-45 connection.
- 6) Select *Properties*.



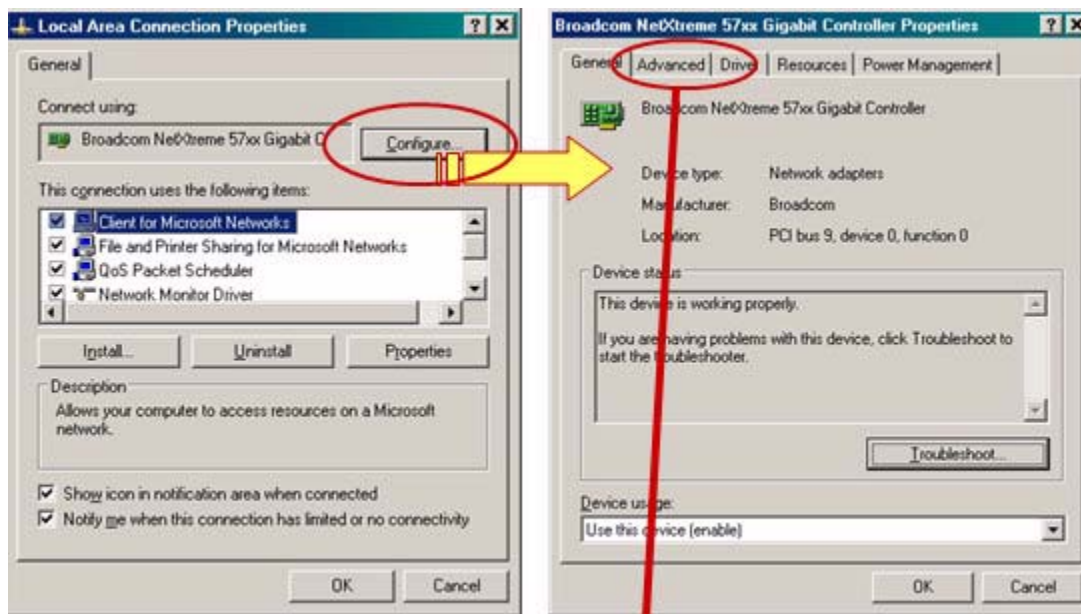
*In the Connection Properties dialog:*

- 7) Select *TCP/IP*.
- 8) Set the address as shown at right.
- 9) Click *OK*.

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10) Click the *Configure* button.

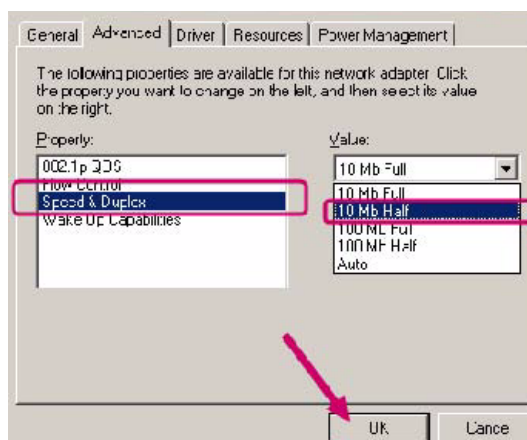
Under the *Advanced* tab:



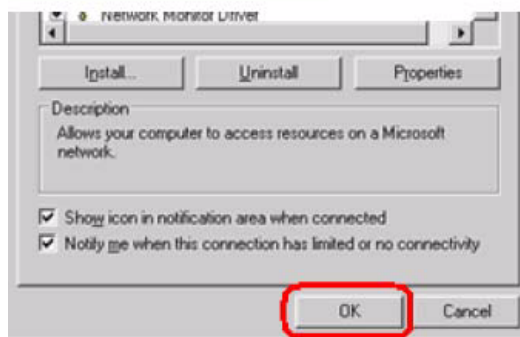
11) Click *Speed & Duplex*.

12) Select *10 Mb Half*.

13) Click *OK*.



14) Click *OK* again to close the Connection Properties dialog.

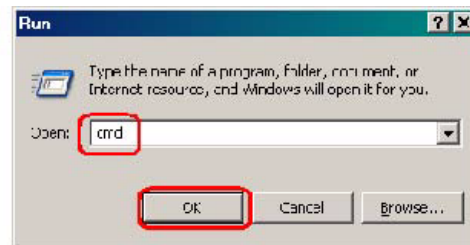


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You will now need to test the direct connection using the ping command as shown below.

From Windows:

- 15) Go to *Start ▶ Run*.
- 16) Enter the following: *CMD*.
- 17) Click *OK*.



At the command prompt:

- 18) Enter the following: `ping 192.168.1.1`
- 19) Press *Enter/Return*.
  - You should see a result like the one shown at right.

```
C:\>ping 192.168.1.1
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=3ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=2ms TTL=64
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms
C:\>
```

### Connection to KSU over a LAN switch

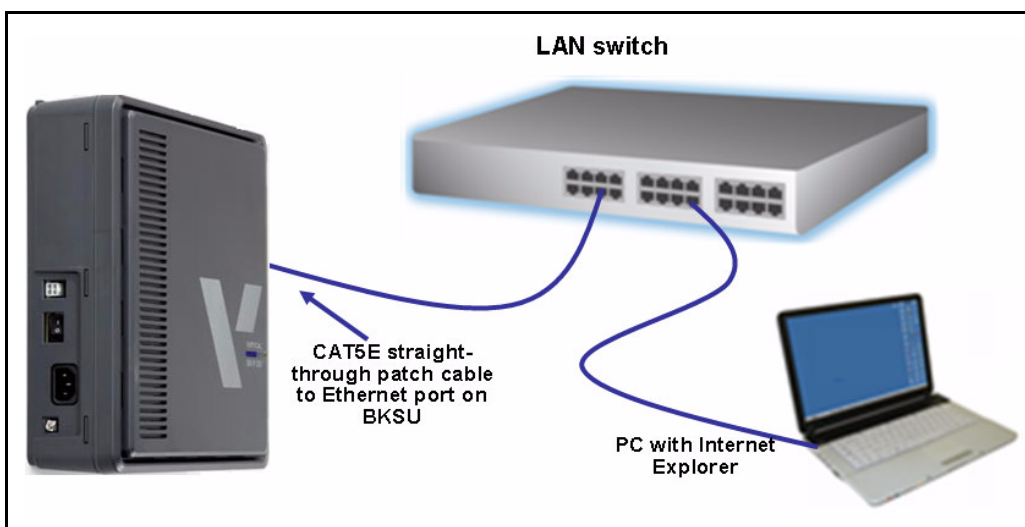
- 1) Plug the KSU's LAN port into the LAN switch via a Category 5E or higher straight-through patch cable.
  - 2) Change the KSU to match the LAN addressing scheme using PGM 108.
- OR-

Set your PC's LAN port to the following settings:

**IP address:** 192.168.1.2  
**Subnet Mask:** 255.255.255.0  
**Default Gateway:** leave blank

**NOTE:**

- The BKSU's default IP address is 192.168.1.1.
- Modify settings as appropriate for the specific local network.



### Additional Support

If you require additional assistance or have questions regarding this topic, please contact Technical Support at 1-888-422-2305, Option 4.