ICOM®

RS-BA1
REMOTE CONTROL
SOFTWARE

## QUICK REFERENCE GUIDE

Contents

Requirements

- Icom radio with most updated firmware that supports RS-BA1(IC-7600 is being used in our documentation)
- A Router for setting up Port forwarding (Linksys RV042 being used in our documentation and is in no way being recommended)
- Desktop Computer that will always remain connected to the Router that is also being used by the Icom radio. This router should be connected directly to the Internet
- Desktop or Laptop computer at the Remote Station that is On the Internet (different Network than the Icom radio network) with exceptions enabled in the Firewall setting.
- CAT-5 Straight cables
- Both Base and Remote Stations computers should have the most latest RS-BA1 driver and software installed (1.2 or Up)

Firewall Considerations

The Windows operating system includes a Firewall setting as standard; this is the security function that can prevent improper access through the Internet. To let the Remote Utility work properly, add it as an exception in the Firewall

In the "Allowed programs and features" list, make sure to Add Remote Control and Remote Utility software's on the Base Station Computer.
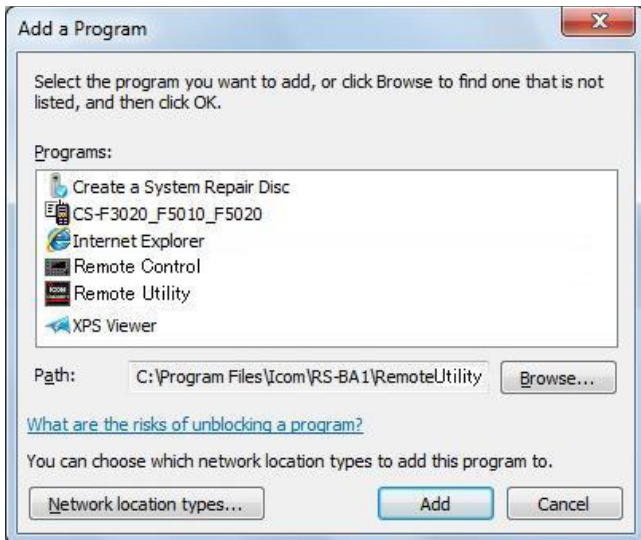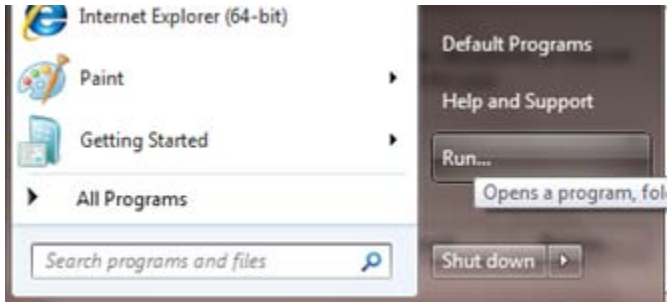

You can remotely control the radio only if on the Base Station Remote Utility Software is up and running. The software should NOT be connected to the Radio under Radio list and Server List. When you remotely connect to your radio, this screen will show the BUSY icon.
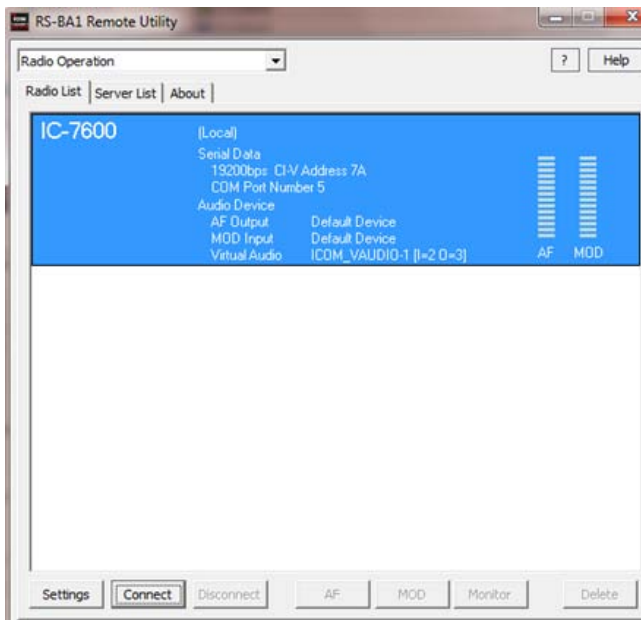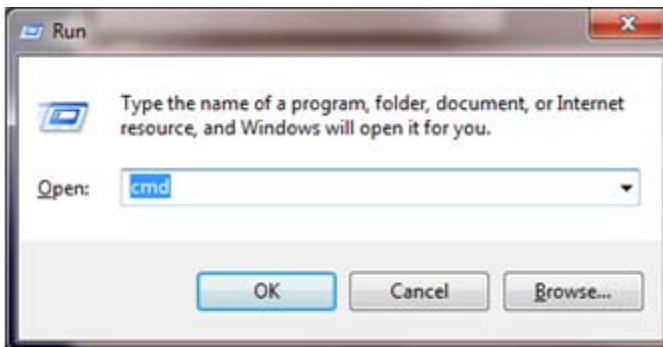
Connecting to the RS-BA1 Locally

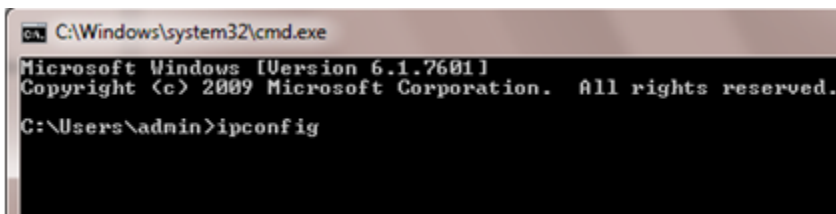## Finding the IP of your Base Station Computer

1. Click **Start**.
2. Click **Run**.

3. Type "cmd".
4. Click **OK**.

5. In the Command window, type "ipconfig".
6. Press Enter on your keyboard.

7. Record your computer's IP address. You will need this information later while setting up the RS-BA1 software. In the following example, the Base Station computer's IP is 192.168.3.106
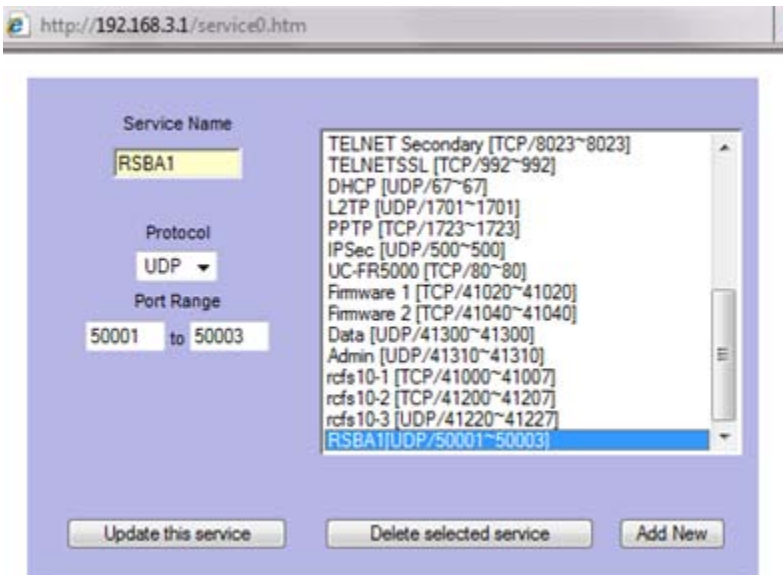

Setting up Port Forwarding

1. Log into your router. The Linksys RV 042 is shown for example purposes only.
2. Click **Setup**.
3. Click **Forwarding**.
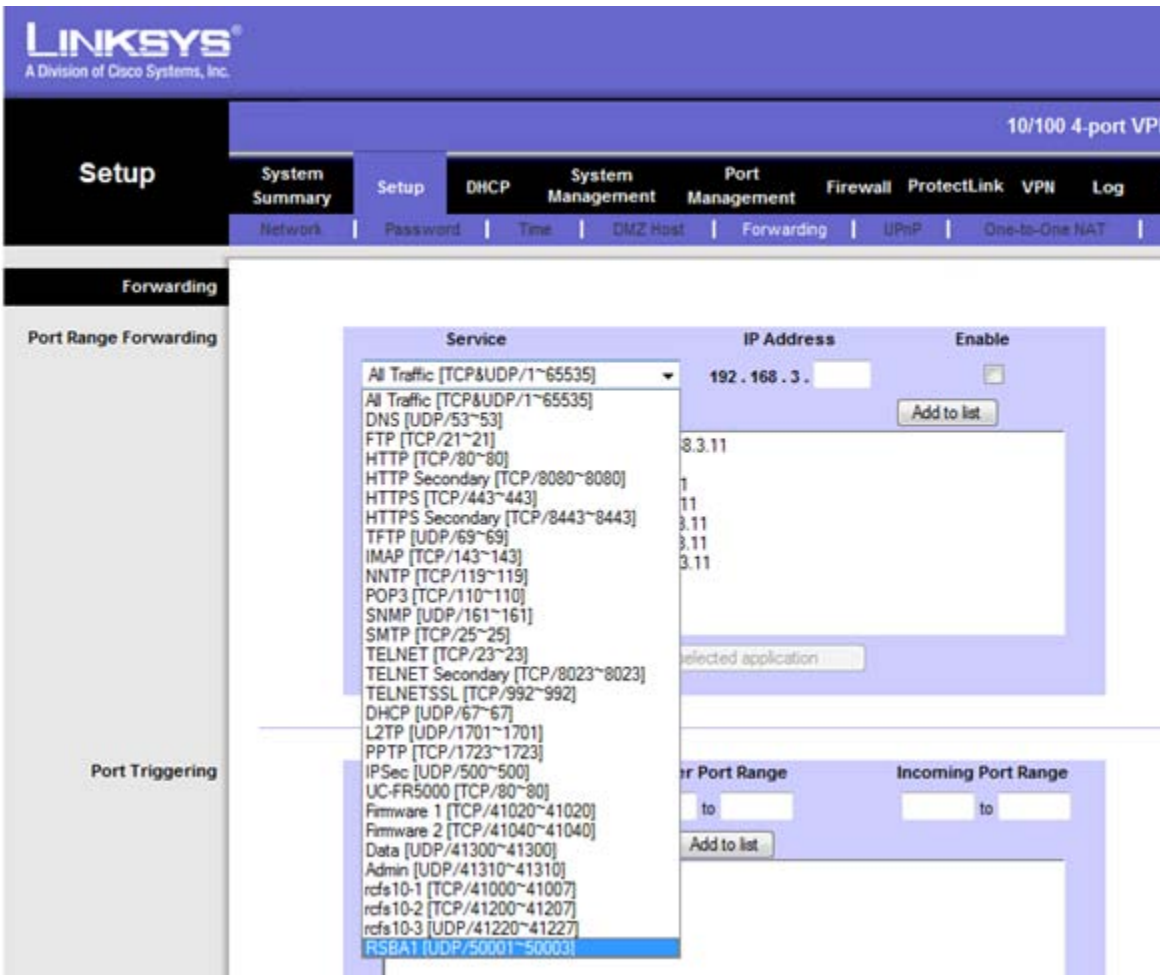4. Click the **Service Management** tab

5. Enter RS-BA1 in the **Service Name** field.
6. Select **UDP** in the **Protocol** field.
7. Enter the Port Range from 50001 to 50003.
8. Click **Add to List**.
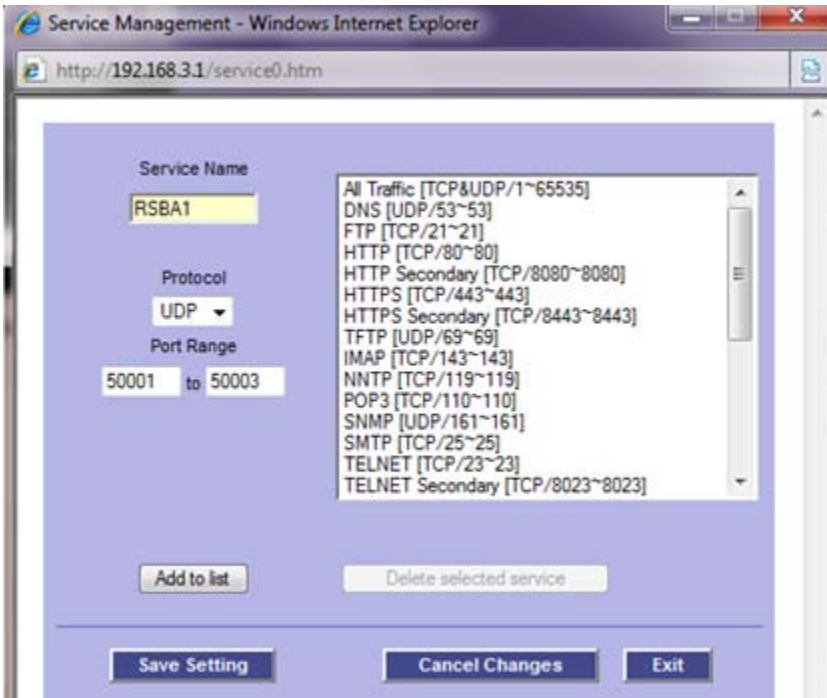
9. Once you see the RSBA 1 in the list, click **Update this service**.

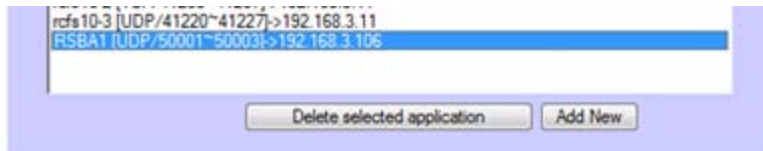10. Select the **RSBA1 UDP** port in the **Service** field.

11. Enter your Base Station's Computer IP in the **IP Address** field.
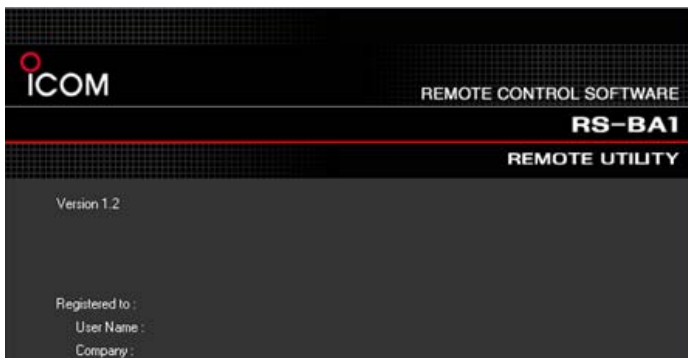12. Click the **Enable** Checkbox.
13. Click **Add to List**.

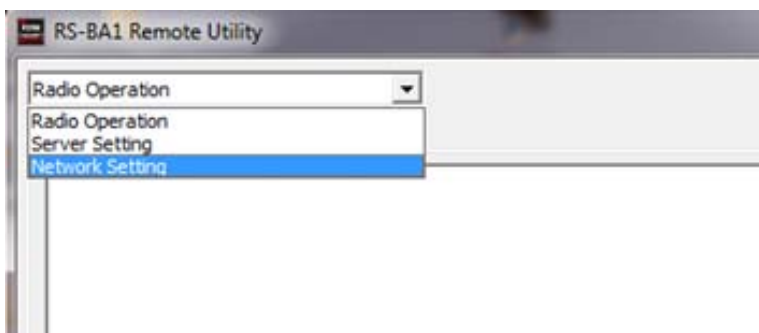14. After your see the RSBA1 ports forwarding box, Click **Save Settings**.

Setting up the RS-BA1 Remote Utility Software for the Base Station
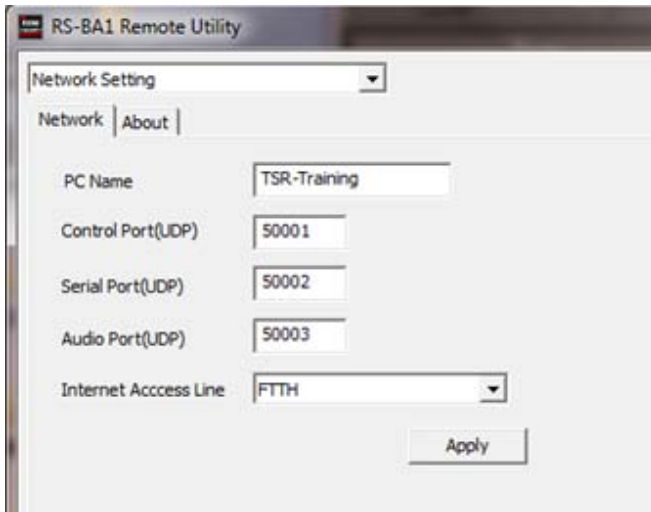
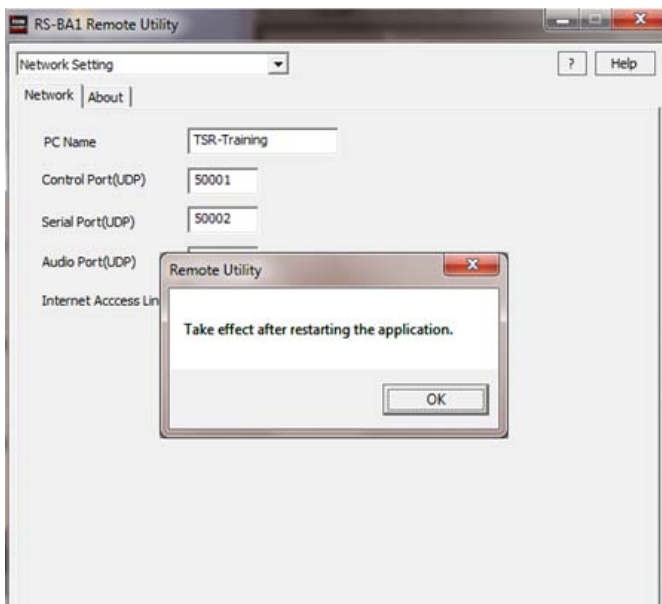1. Open the RS-BA1 Remote Utility Software.

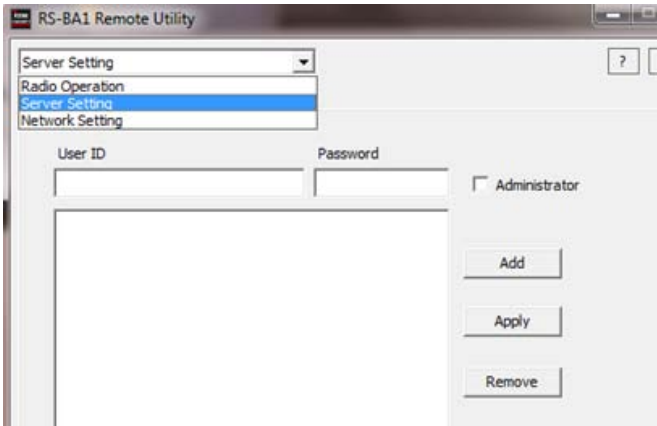2. Select **Network Setting**.

3. Enter your Computer's Name in the **PC Name** field.
4. Choose FTTH in the **Internet Access Line** field.

5. Click **Apply**.
6. Close (exit) the RS-BA1 Remote Utility software and open it again.
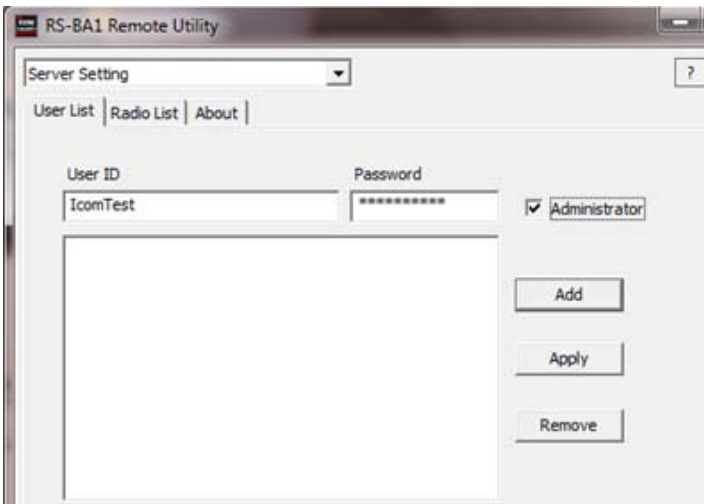
7. Select **Server Setting**.
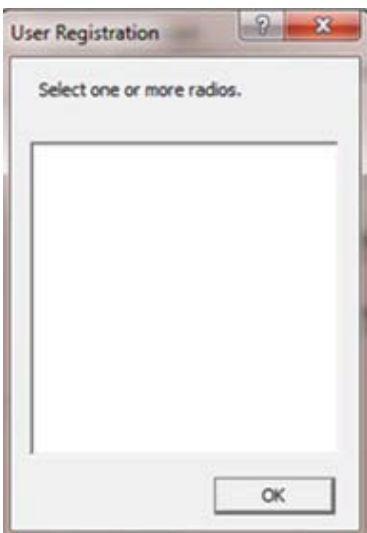

8. Click the **User List** tab.
9. Enter your User ID and password
10. Click the **Administrator** Checkbox
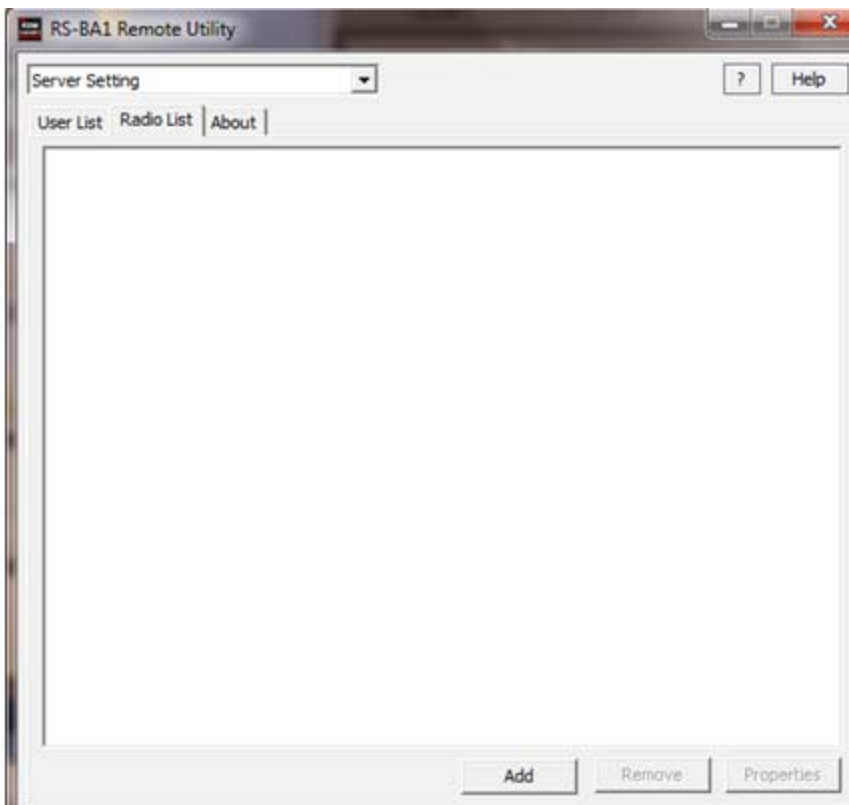11. Click **Add**. Record/save your user ID and password for future reference.

12. Click OK

13. Click the **Radio List** Tab.
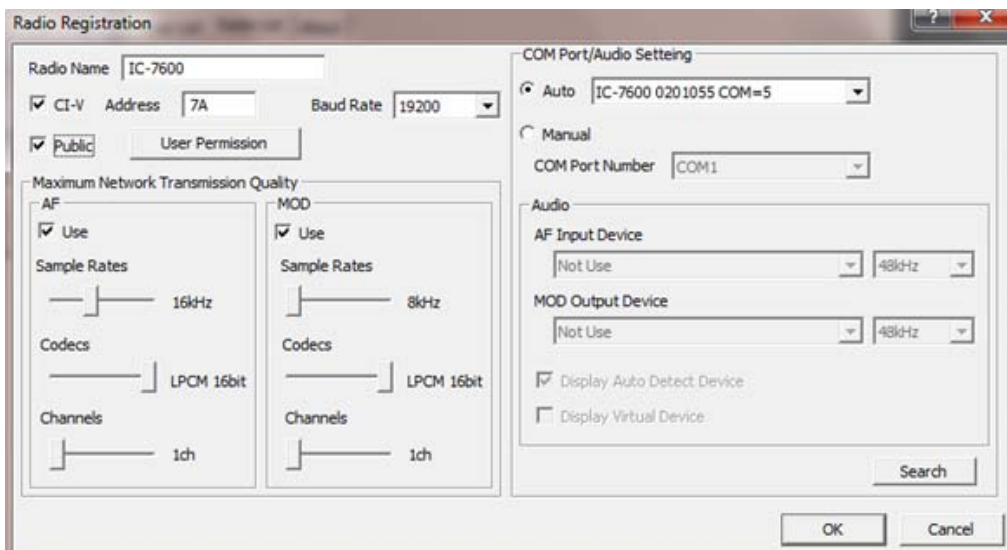14. Click **Add**.

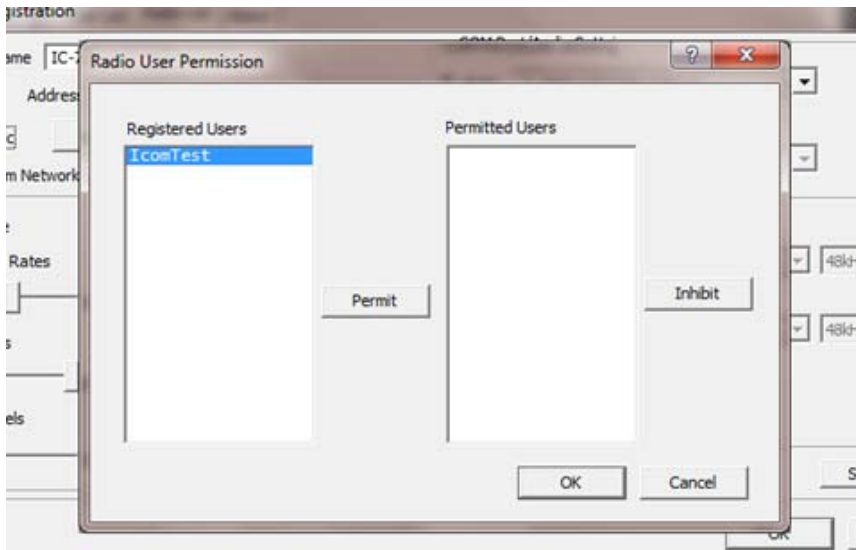15. Enter your radio name in the **Radio Name** field.
16. Click the **CI-V** checkbox and enter your CI-V address in the **Address** field. This information is available in the Instruction manual for your radio or in the **Set Mode** window.
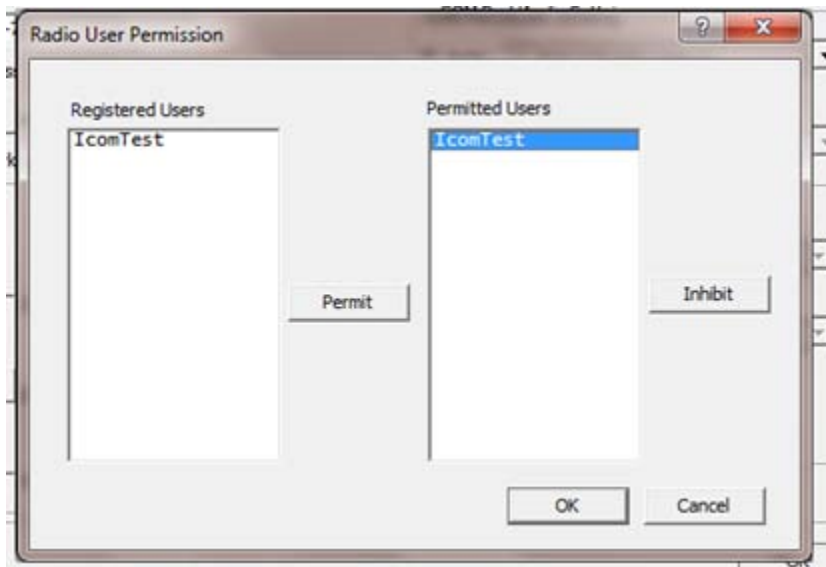17. Click the **Public** Checkbox.
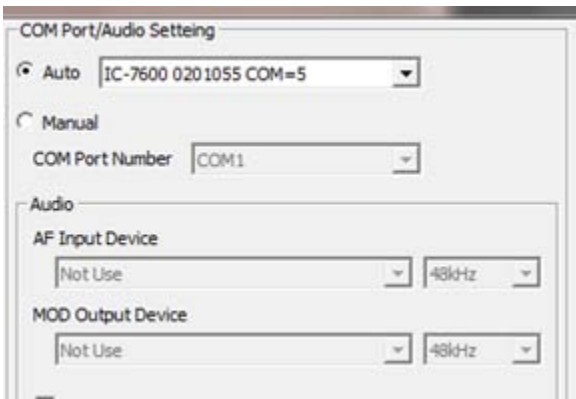18. Click **User Permission**.

19. Select your Username from the **Radio User Permission** box and click **Permit**.

20. When you see your Username in the **Permitted Users** field, click **OK**.
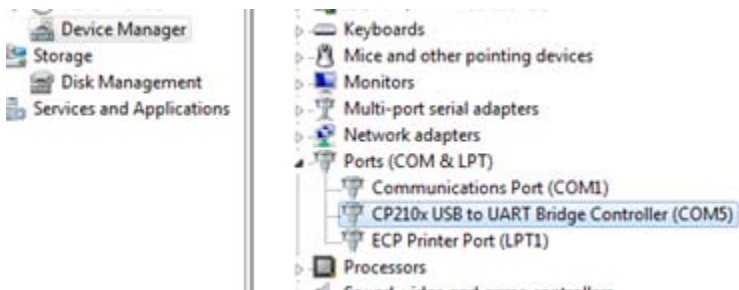
21. When using a USB connection between your computer and Icom radio, Click **Auto** for **COM Port/Audio Setting**.
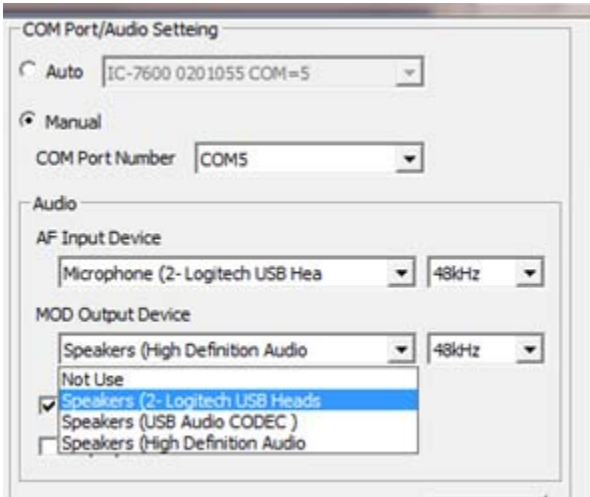

22. When setting a COM port manually, click the **Manual** Checkbox and select your COM Port in the **COM Port Numbe**r field.
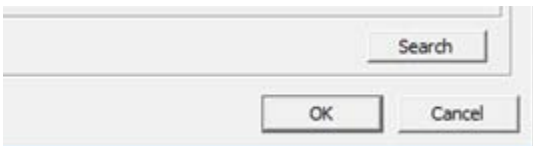

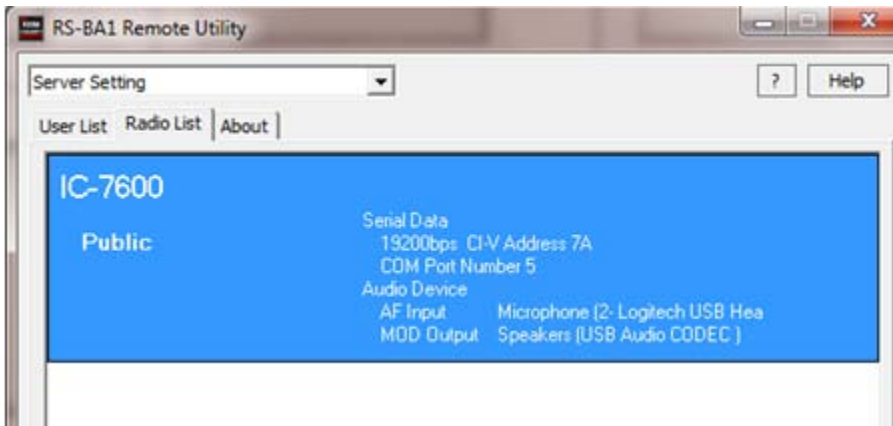23. You can look up your COM Port number in the **Device Manager** window.

24. When using a USB headset/mic, select your headset under AF Input / **MOD Output Device**. Your computer should auto detect your speakers.
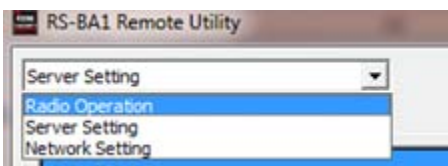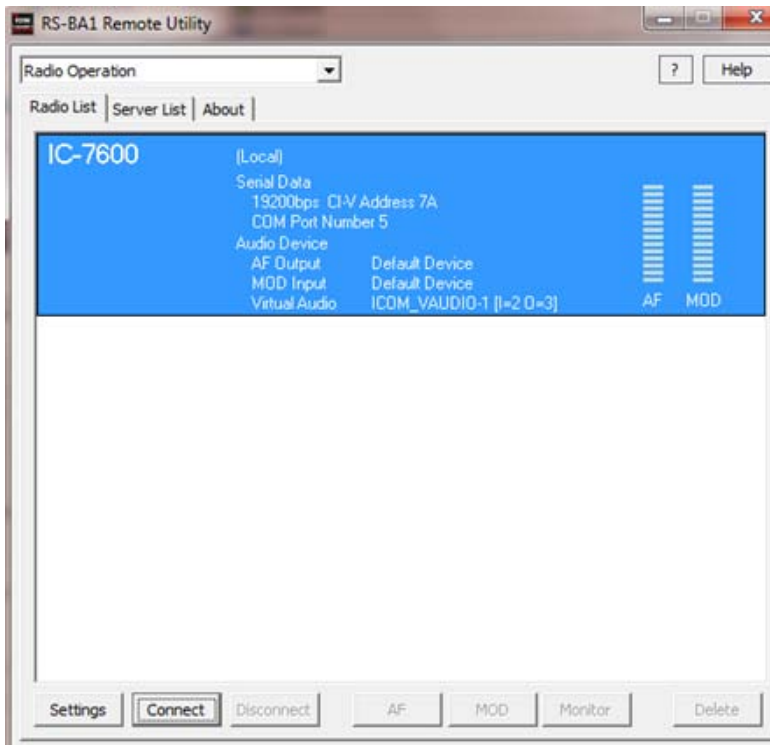

25. Click **OK**.

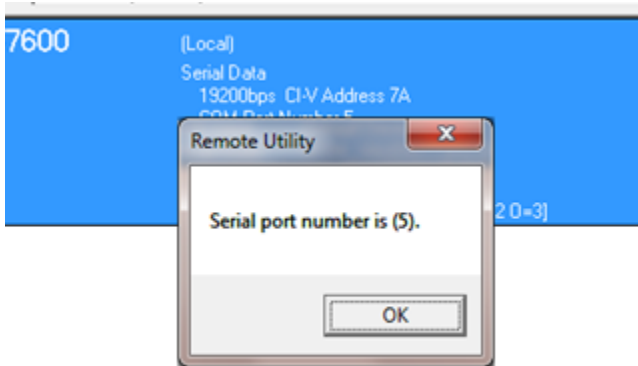26. Click the **Radio List** tab and you will see your radio.

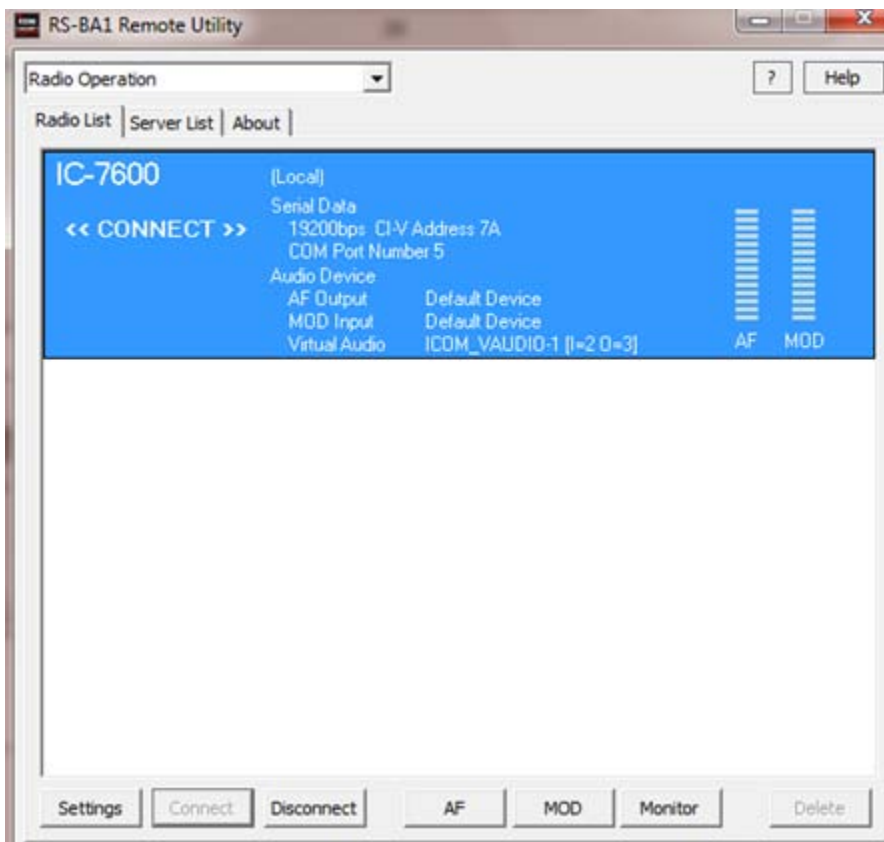

27. Select **Radio Operation**.

28. Select your radio and click **Connect**.

29. Click **OK** on the **Remote Utility** Box (Com port number can be looked up in the Device manager).

**<<CONNECT>>** will appear if the connection is successful.

Connection Errors

If you get a **<<CL NG>>** error, verify the following:

- Is the COM Port correct?
- Are all cables plugged in the correct connectors?
- Check that all devices are powered.
- The firmware on your Icom radio should be current and that supports the RS-BA1.
- Reboot your computer, sometimes the COM Port (regular and virtual) requires a PC reboot for complete installation.
- Audio issues can be resolved by selecting the right Output/Input Audio Device in the **Settings** window (below). This screen appears after clicking **Settings**.
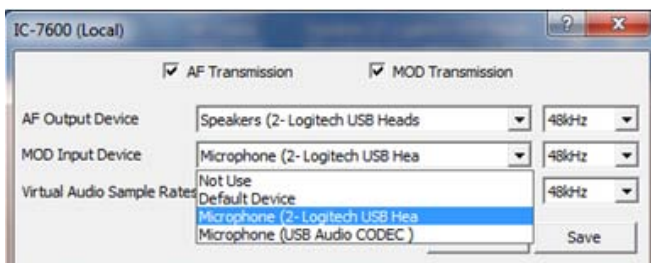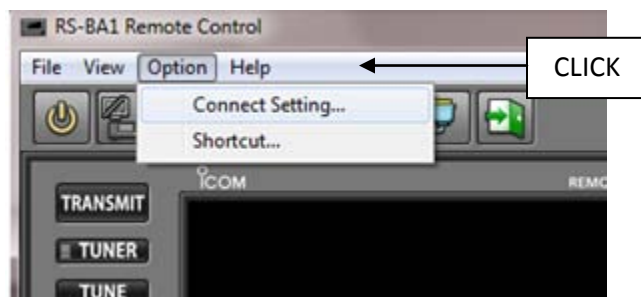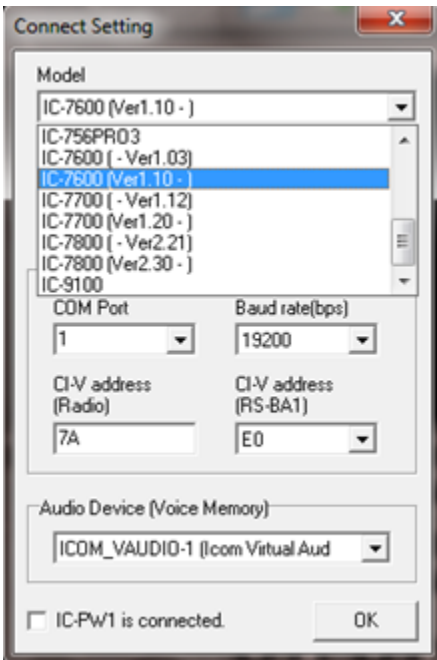
Setting up the RS-BA1 Remote Control Software
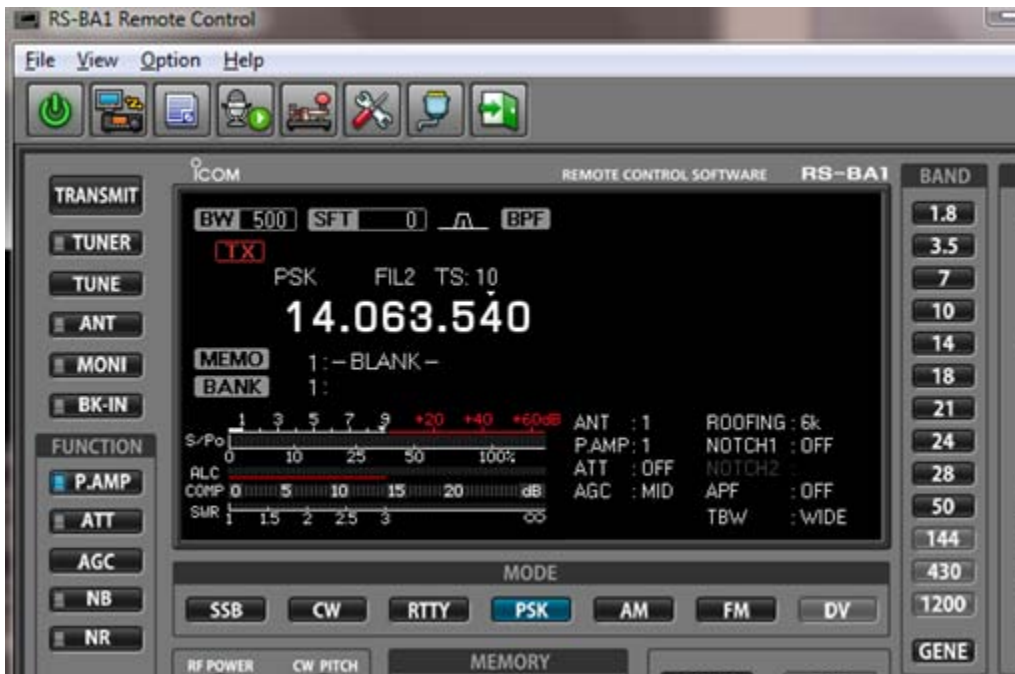
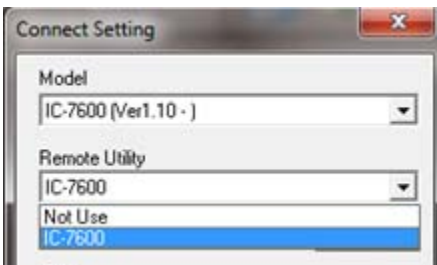1. Verify that the Remote Control software is turned Off.
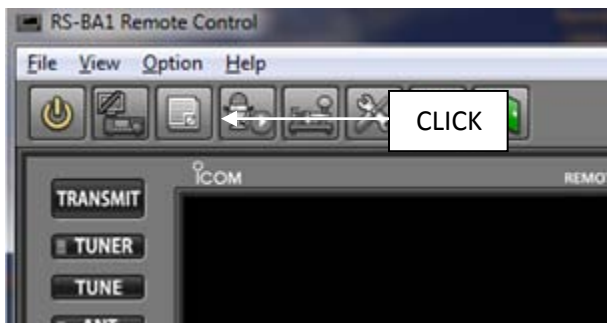
2. Click **Option** and select **Connect Setting …**

3. At the **Connect Setting** window, click **Model** and select your radio (verify the revision number).
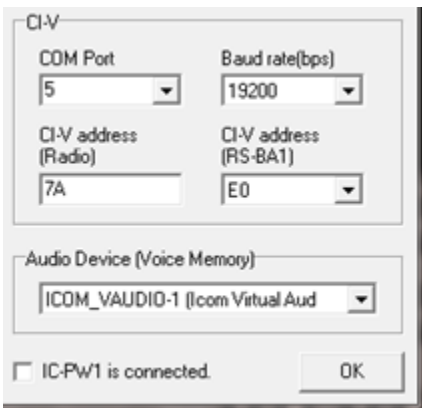

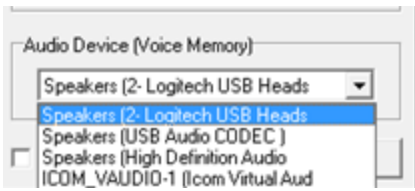4. Click **Remote Utility** and select your radio.

5. Click **COM Port** to select your port
6. Enter the address for your model radio in the **CI-V address (Radio)** field.

7. If using any USB headsets/mic, click **Audio Device (Voice Memory)** and select your headset/mic.
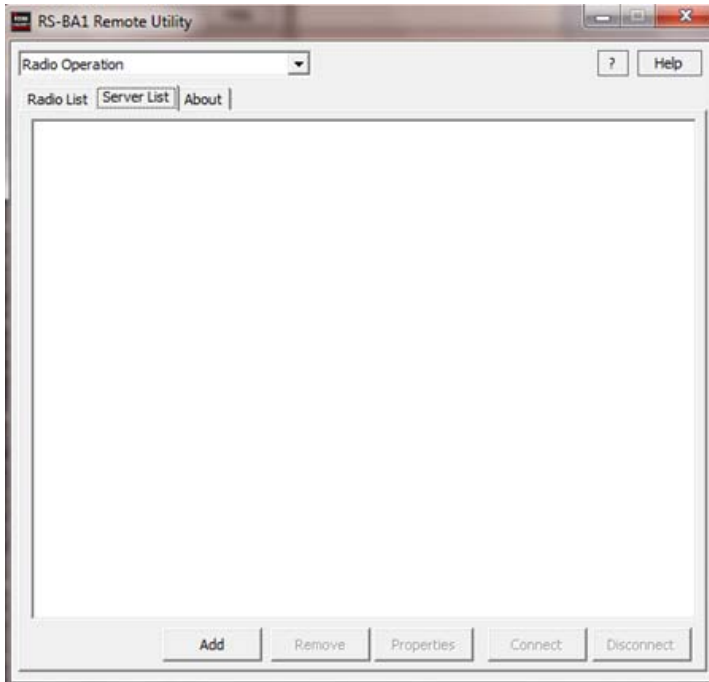
8. Turn the Remote Control Software on. Wait for the software to change its frequency.
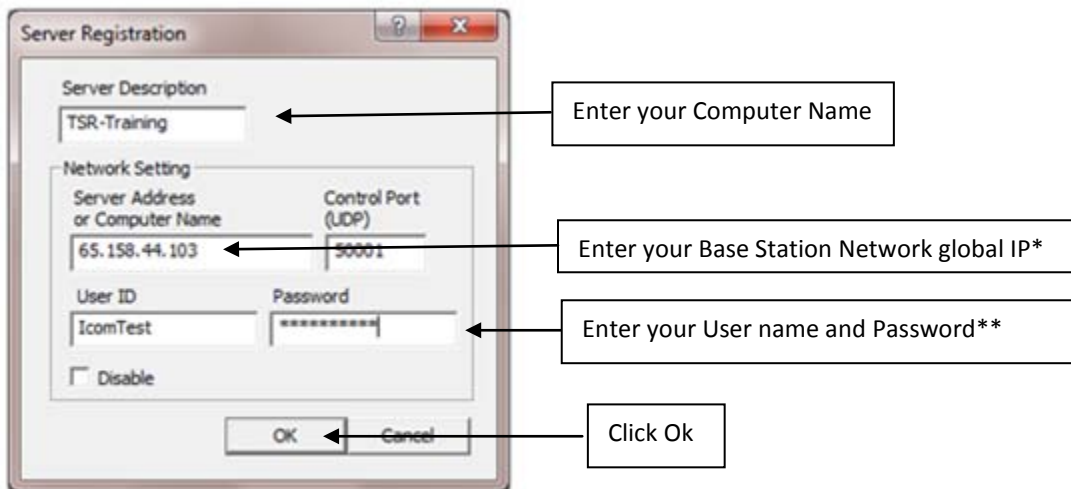
Accessing the RS-BA1 Remotely over the Internet

The following steps are for the Remote Base Station computer only.

1. Click **Server List**.
2. Click **Add**.

3. Enter following information:

Enter your Computer Name

Enter your Base Station Network global IP*

Enter your User name and Password**

Click Ok

* You can check global IP on the Router settings. Or you do a search for "whats my ip" on Google website.
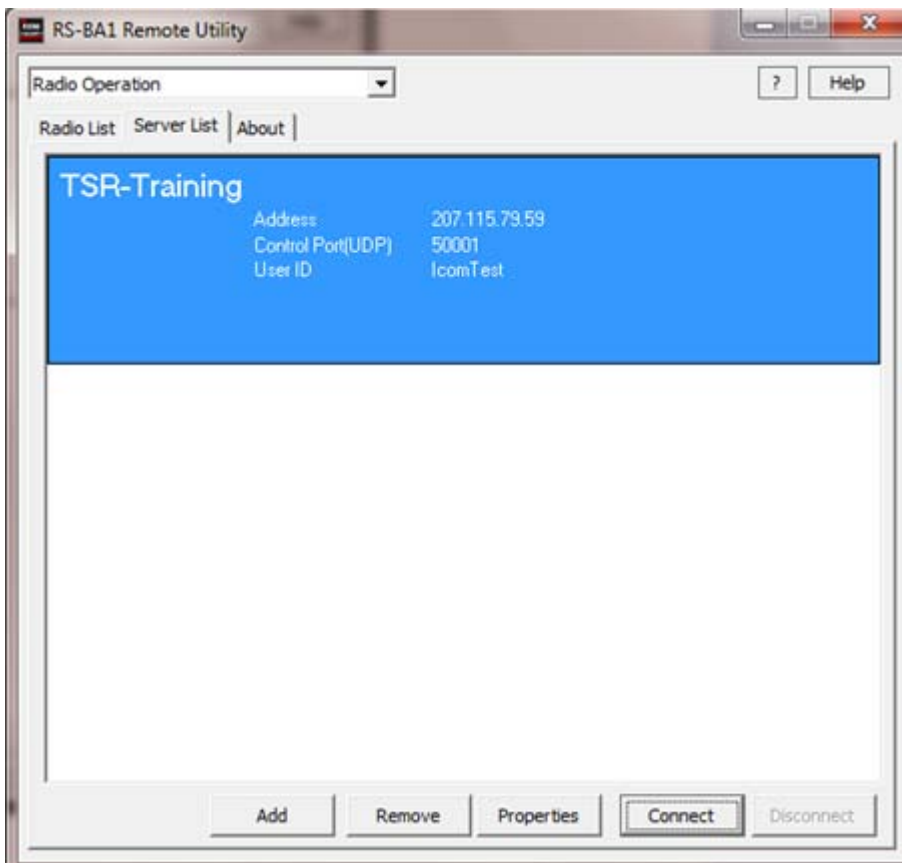
** Same Username/Password that you have created previously

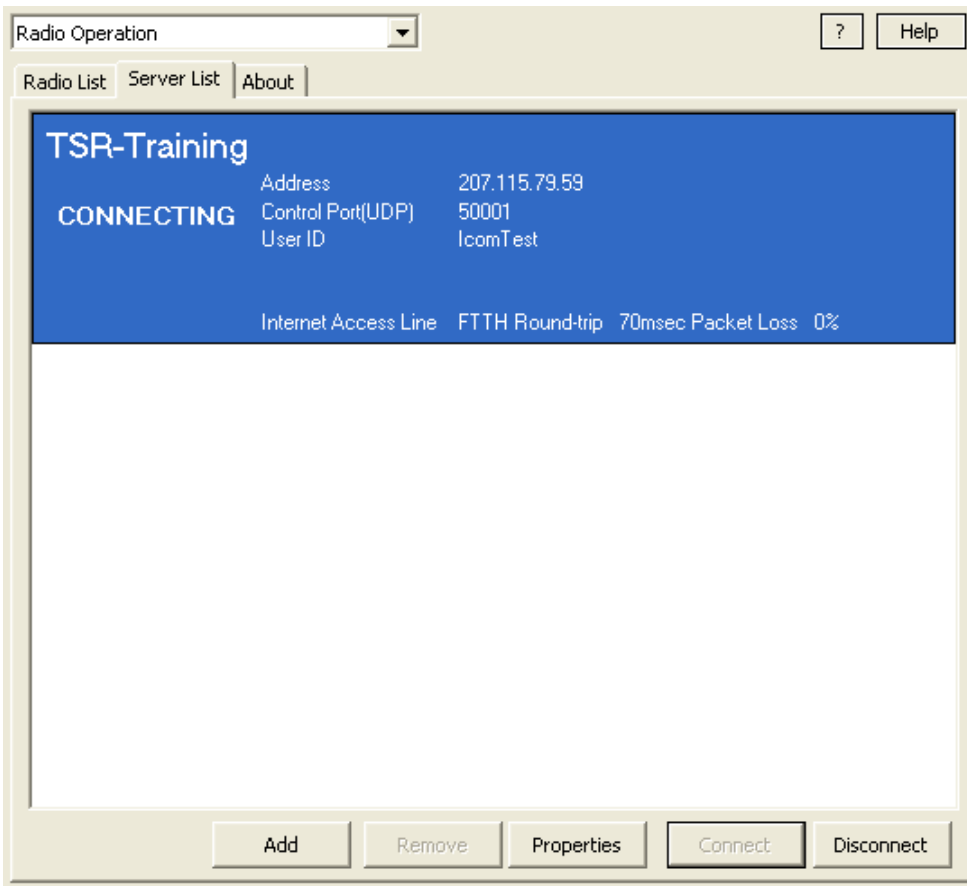4. You have now created a Server on your Remote computer to talk to your Base Station network.
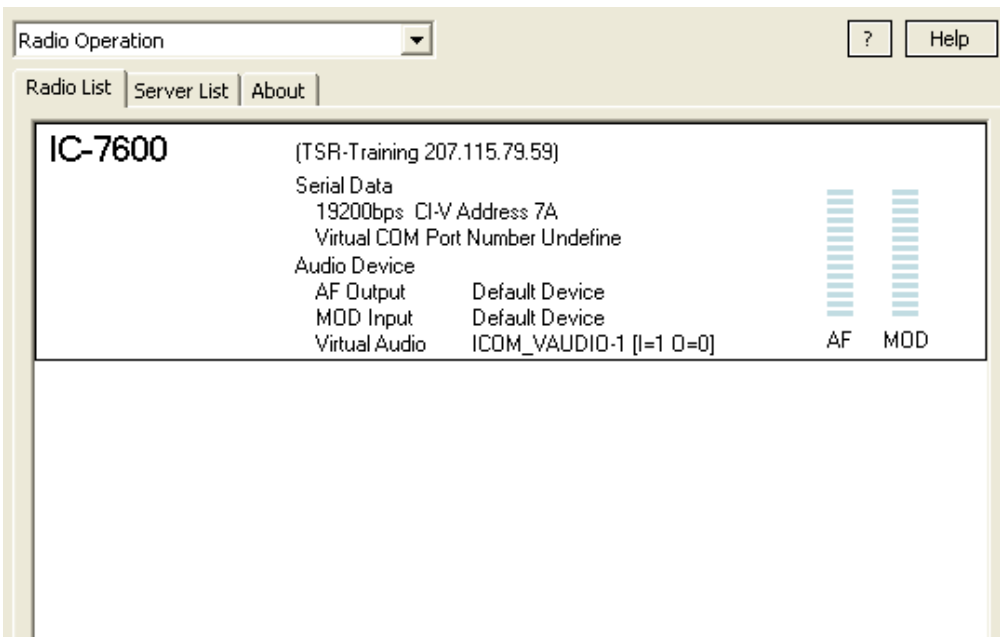

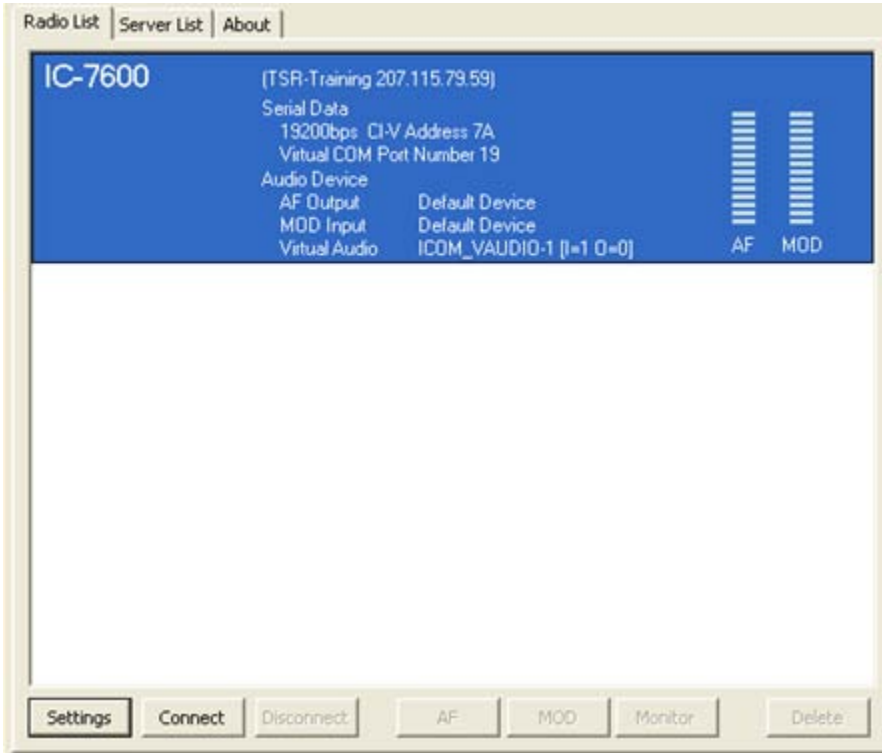5. Select **Server List**.
6. Click **Connect.**

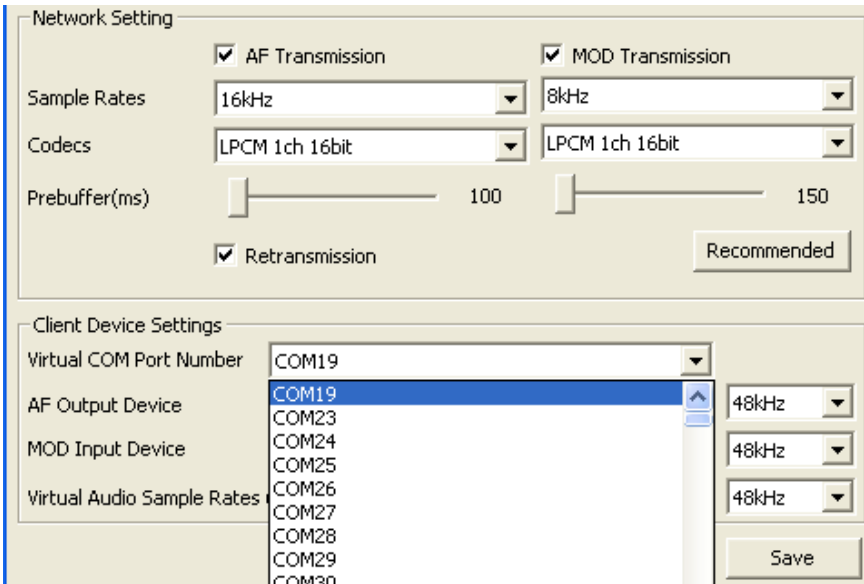If connection is successful, you will see the following window. **CONNECTING** means you *are* connected.

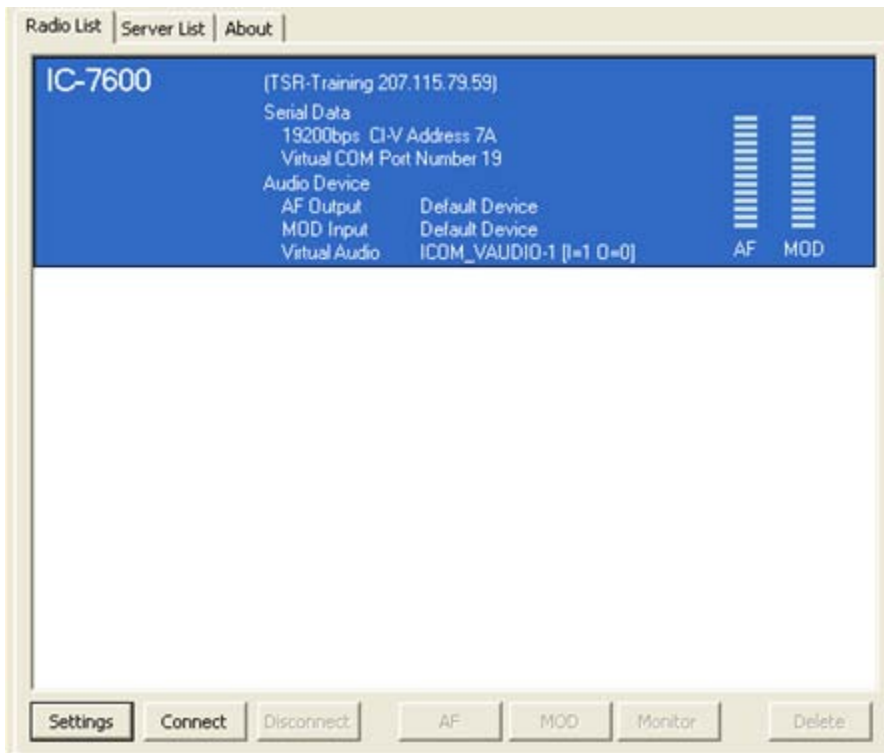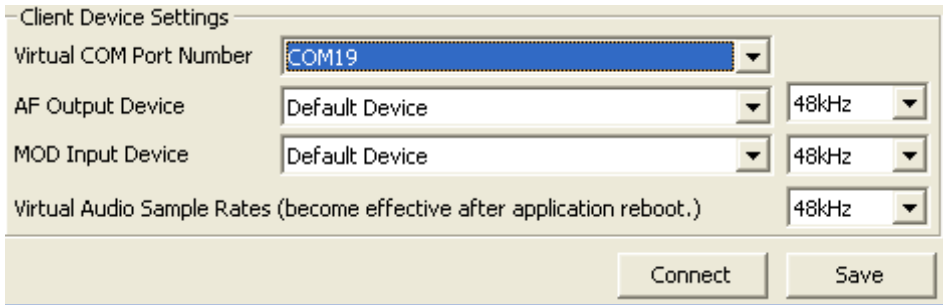7. Click **Radio List** and you will see your radio come up.
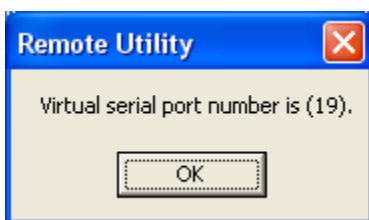
8. Click your radio.
9. Click **Settings**.

10. Click **Virtual Com Port Number** and select your virtual COM Port (You can look up your Virtual Comport in the Device Manager).
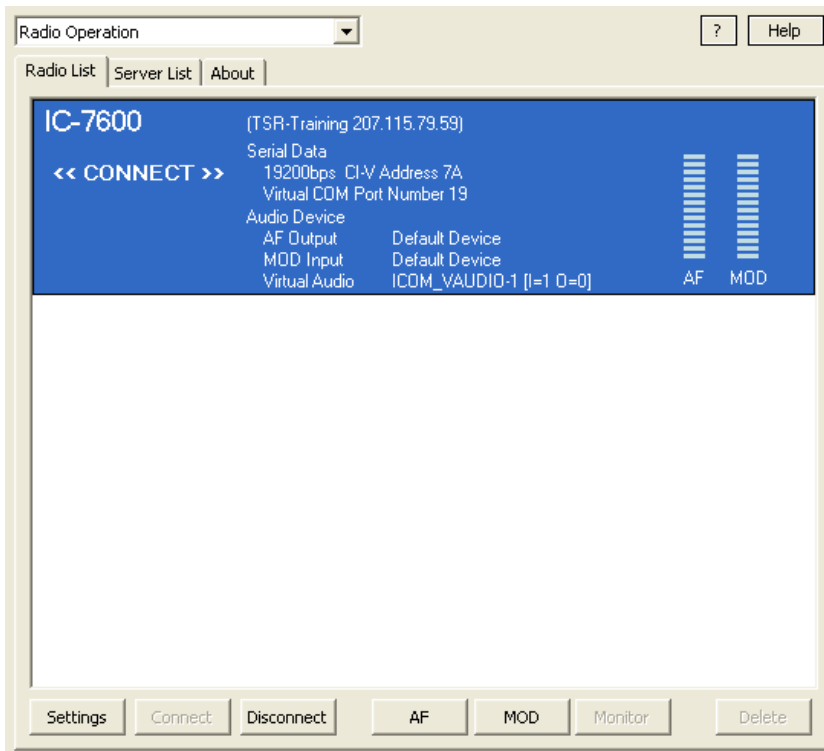
11. Click **Save**.

12. Click **Connect**.

13. Click **OK** on the **Remote Utility** window.

If you see **<<CONNECT>>** on the window your connection is successful.


14. Open the RS-BA1 Remote Control software on the Remote Station computer and set it up as described in **Setting up the RS-BA1 Remote Control Software**.
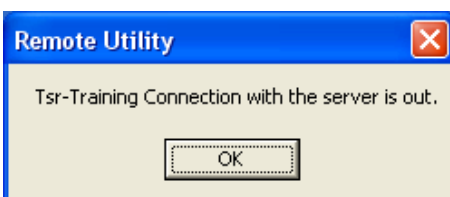
Errors Explained

You will get the **OFFLINE** error on the remote computer Utility Software if the Remote Utility software on the Base Station computer is not running. In order to use the Radio remotely (over IP), you should have the Remote Utility running (but *Not Connected*).
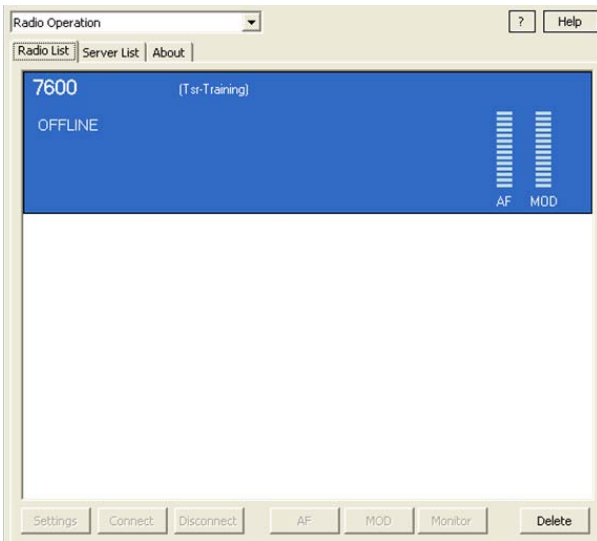
You will see a **BUSY** error on the remote computer's Utility Software if the Remote Utility on the Base Station computer is connected to the radio (Locally). You won't be able to connect because local Base computer is connected to radio.
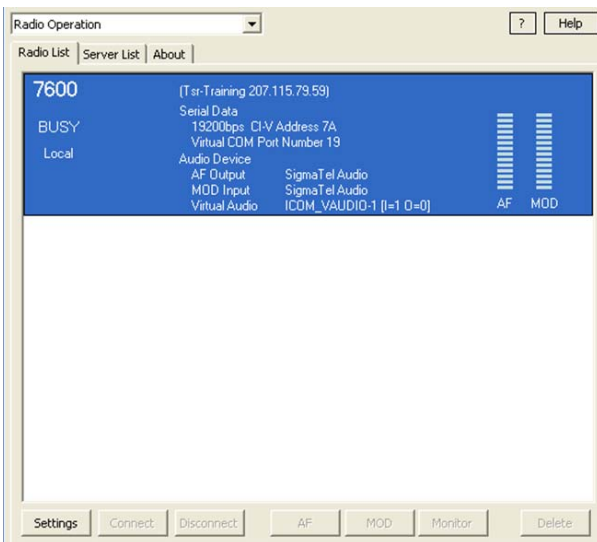
A **Server is out** error displays on the remote computer's Utility Software when network goes down on the Base station computer and its Remote utility software.