Specifications

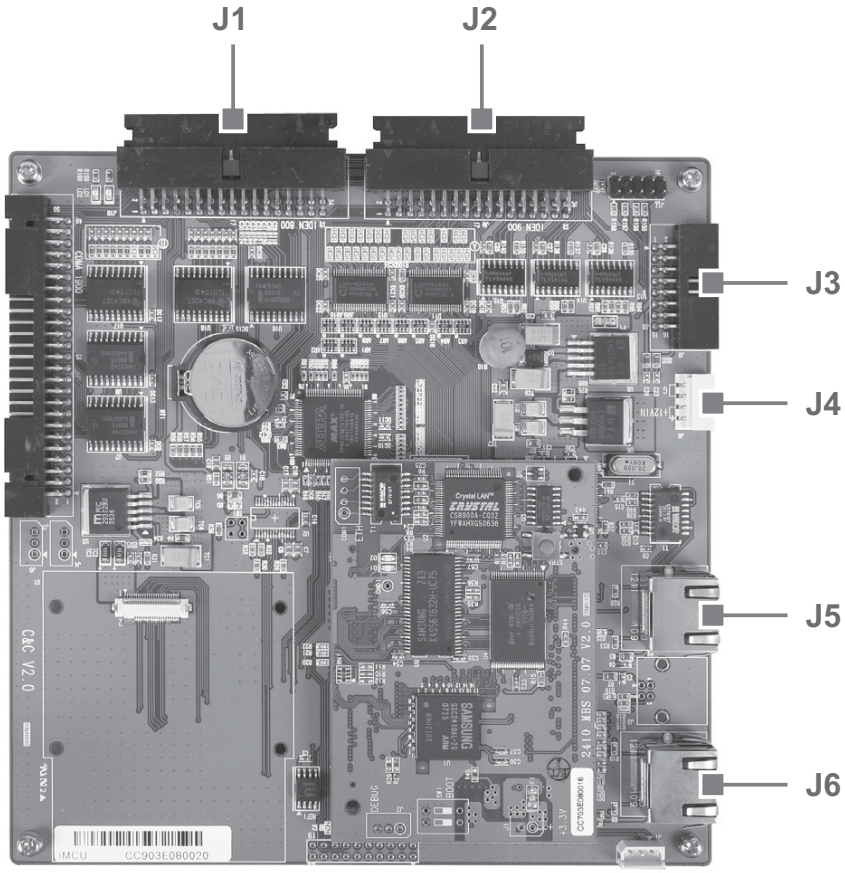
Item		Specifications
Environmental	Operating Temp	-10˚C~50˚C (14˚F~122˚F)
	Humidity	20%~90%RH
	Cooling method	Convection
Voltage		AC110~125V
Current		6A Max / 6V, 12V, 27VDC
Frequency		50~60Hz typical
Leakage Current		0.5mA max.@110V AC

2.2.3 UDC (Up Down Converter)

The UDC (Up Down Converter) is basically a bi-directional amplifier that sharply filters out unwanted noise.

2.2.4 MCU (Main Control Unit)

The MCU (Main Control Unit) is the control unit of iDEN MINI. It controls and monitors operational parameters. It is also responsible for generating an alarm, an event log and many other functions of the iDEN MINI.



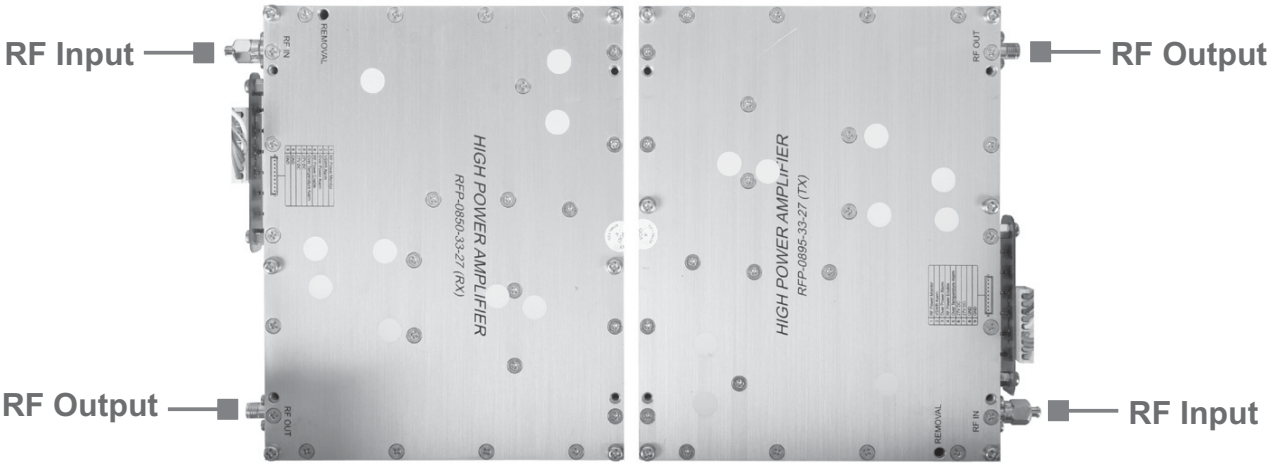
Pin Map

Port	Connected to
J1	iDEN 800 PLL, B/S, OUT DET, DL(Tx)/UL(Rx) HPA
J2	iDEN 900 PLL, B/S, OUT DET
J3	Alarms, LEDs
J4	MCU Vcc (+12V)
J5	Local Port
J6	Remote Port

2. Description

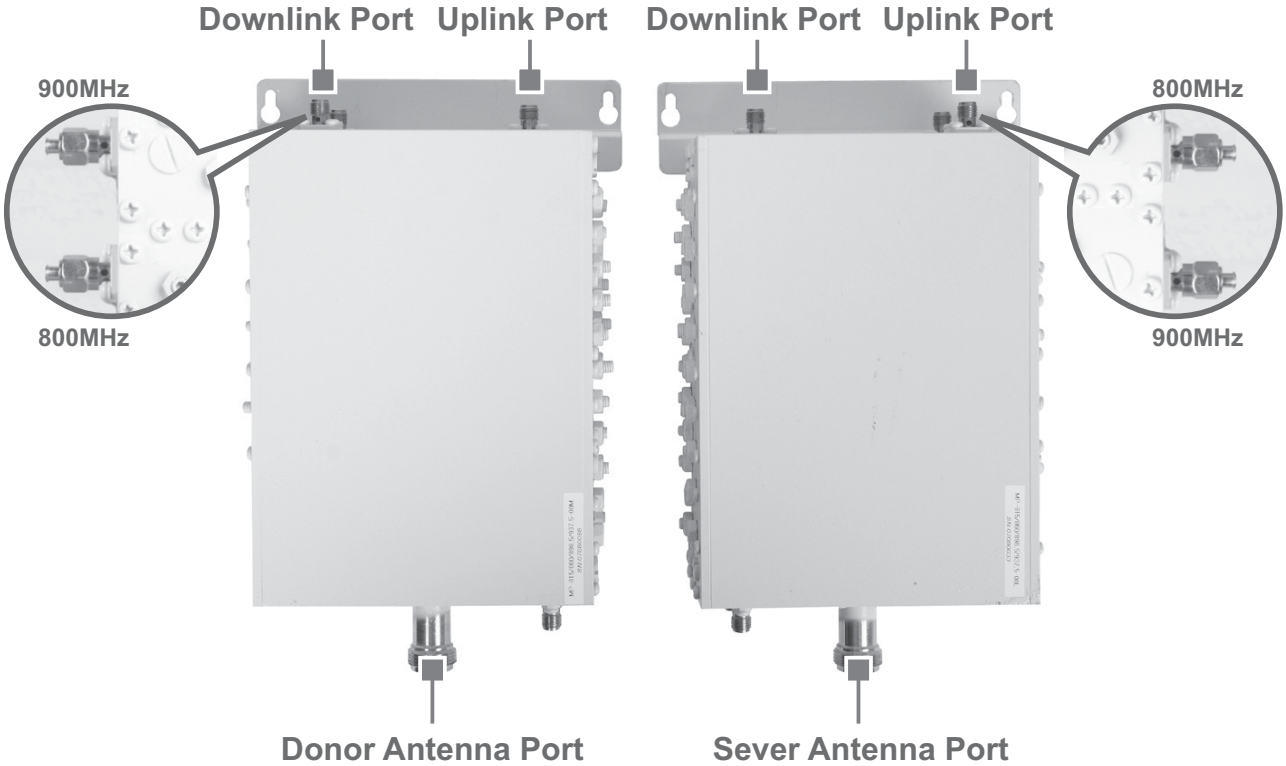
2.2.5 HPAs (High Power Amplifiers)

The HPAs (High Power Amplifiers) amplifies the transmitted signal from a base station at the final stage of the repeater and vice versa.



2.2.6 Multiplexer

A multiplexer is a device that combines two or more signals onto a common channel or medium to increase its transmission efficiency.



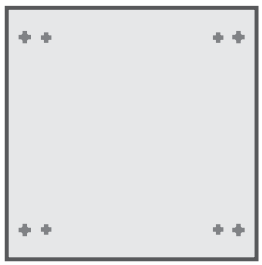
The installation procedure is as follows:
- Check List of Items
- Mounting
- Grounding
- RF Cable Connection
- Power On

3.1 Check List of Items

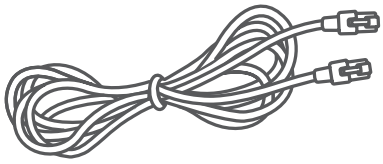
Index	Items	Quantity
1	Repeater	1
2	AC Cord	1
3	Anchor Bolts	4
4	Wall Mounting Template	1
5	UTP Cross LAN Cable	1
6	Quick Guide	1
7	User's Manual	1

3.1.1 Items

Repeater



Wall Mounting Template



UTP Cross LAN Cable

AC Cord

Anchor Bolts

User's Manual

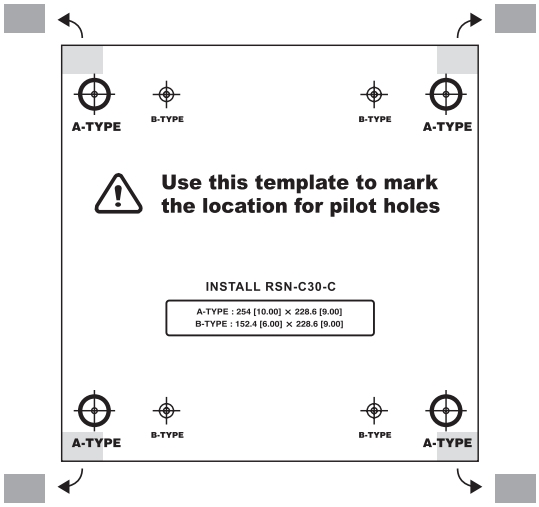
Quick Guide

3.2 Mounting

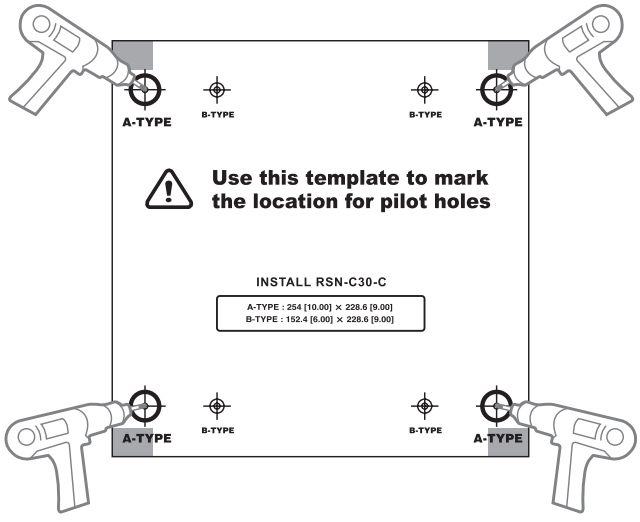
iDEN MINI is easy to mount using the assembled mounting bracket, which has 9 holes for the provided 5/16” fixing screws.

Step 1 Remove the cover of double-coated foam tape squares at each corner on the back side of the template.

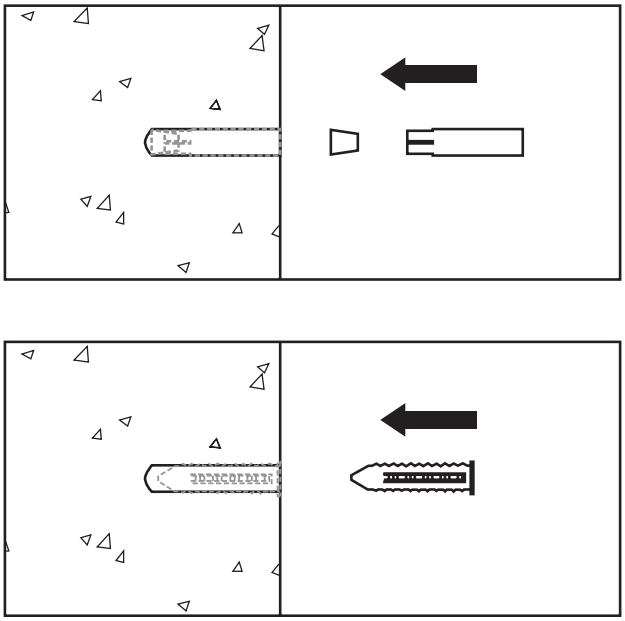
Step 2 Stick the provided template to the wall using the tape squares while adjusting the horizon.
Mark the position for 4 screws depending on the installation location.



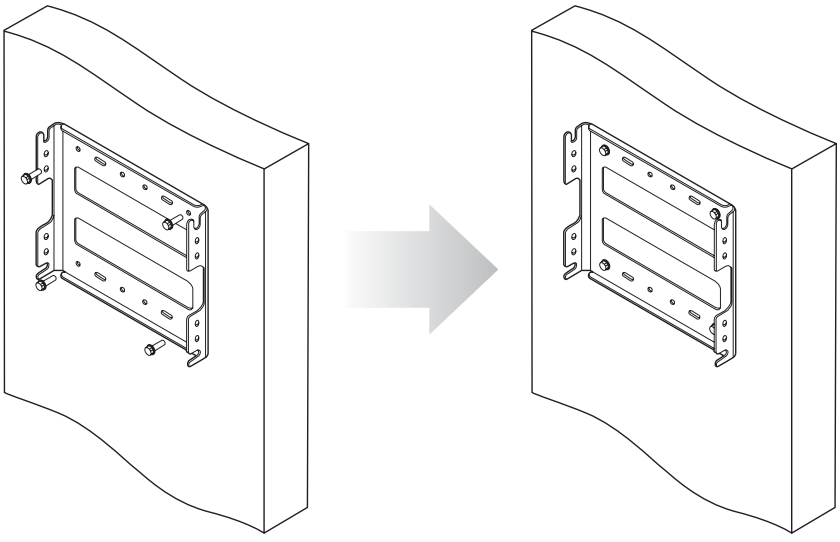
Step 3 Drill holes directly through the template.



Step 4 Install the set anchor bolts or the plastic anchor bolts on the holes.

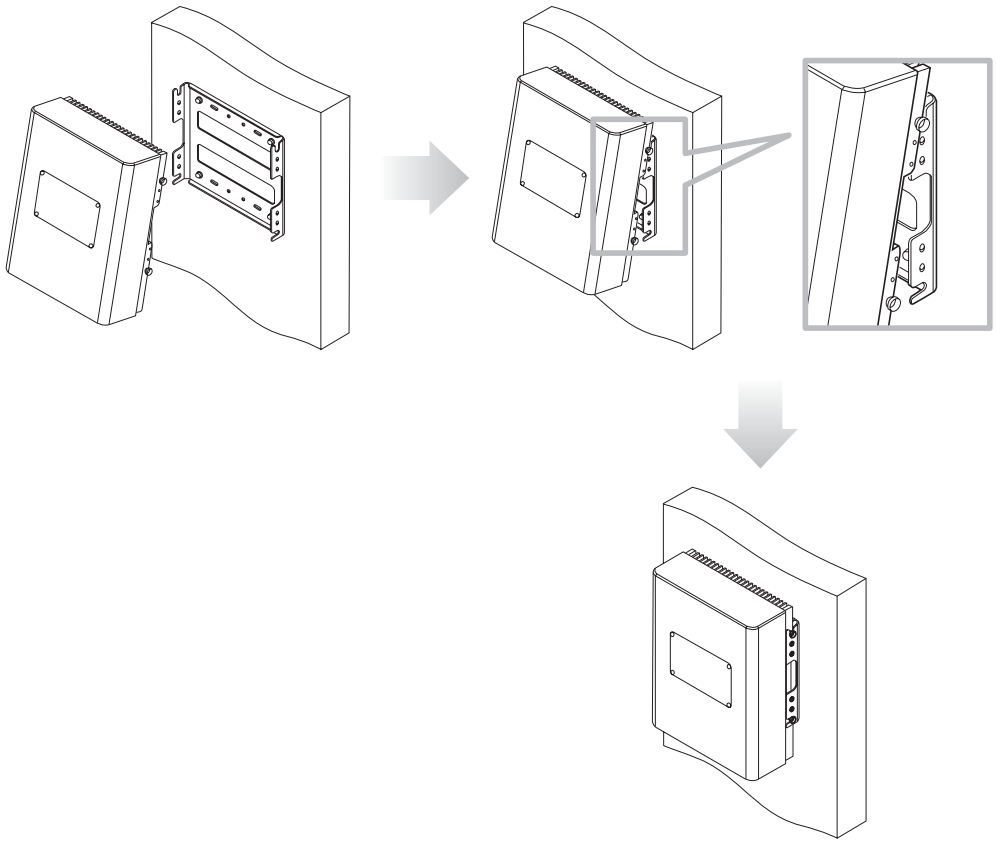


Step 5 Attach the mounting bracket to the wall using provided bolts or extra screws.

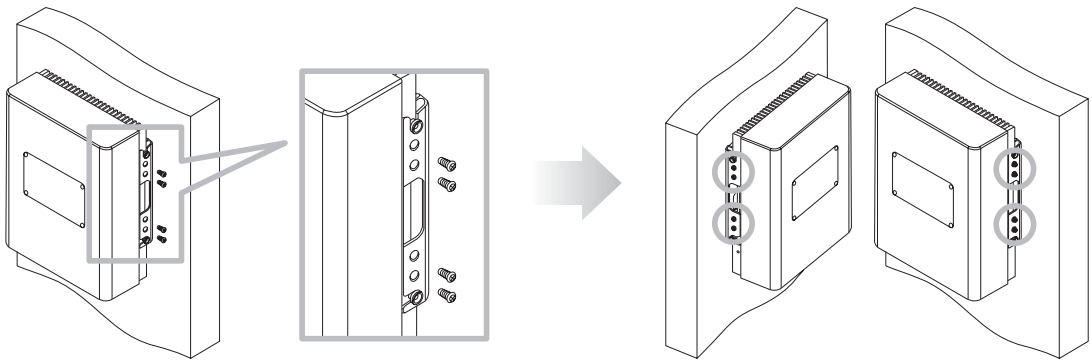


3. Hardware Installation

Step 6 Lean the iDEN MINI to hang the topside of the Guide Ring on the mounting bracket, and push toward the wall to mount.

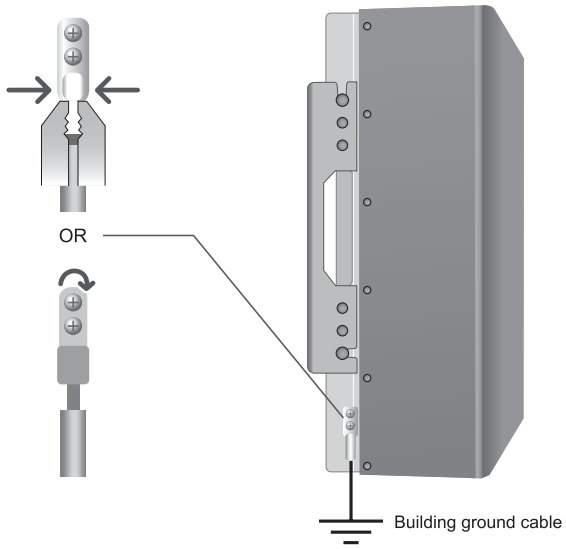


Step 7 Fix the iDEN MINI using 8 screws provided.



3.3 Grounding

A rod on the left side is intended for a building ground.
Connect the ground cable to the rod.



Warning

Dangerously high voltages may occur and damage the equipment if the equipment is not grounded properly.

3.4 RF Cable Connection

Step 1 Connect a cable from a donor antenna to the DONOR ANTENNA Port.

Step 2 Connect a cable from a repeater's service antenna to the SERVER ANTENNA Port.

Warning

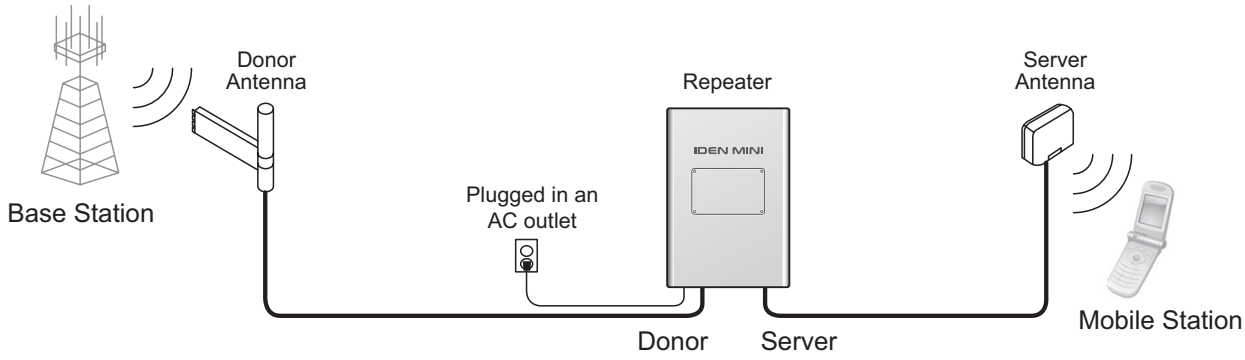
DO NOT connect or disconnect the coaxial cable while the power is on.

Note

Enough isolation?
Antenna isolation = Path loss between the server antenna port and the donor antenna port
Antenna isolation ≧ Repeater max. gain +15dB
If antenna isolation < Repeater max. gain +15dB → System oscillation or Low gain

3. Hardware Installation

Model	Max Gain	Minimum required isolation
RSN-iDEN-25-C	65dB	≥ 80(=65+15)



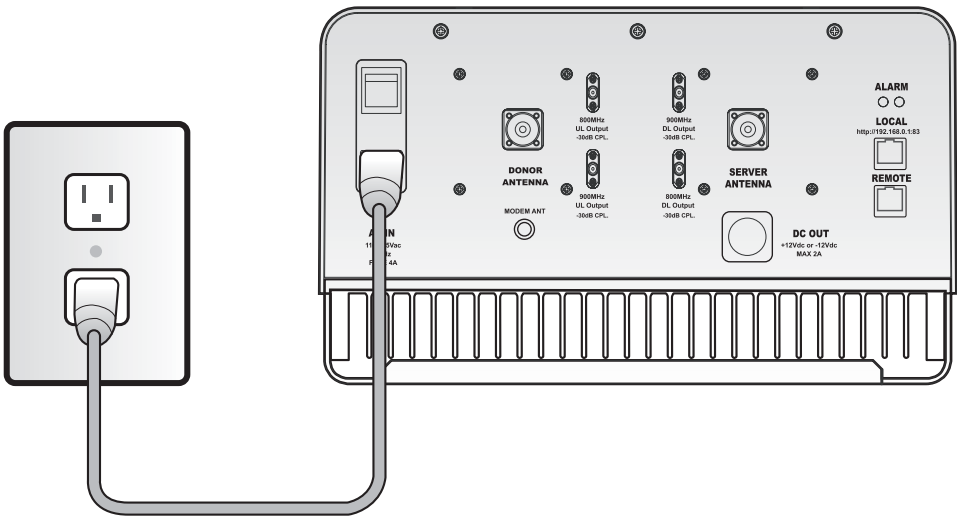
3.5 Power On

Step 1 Connect the power cord.

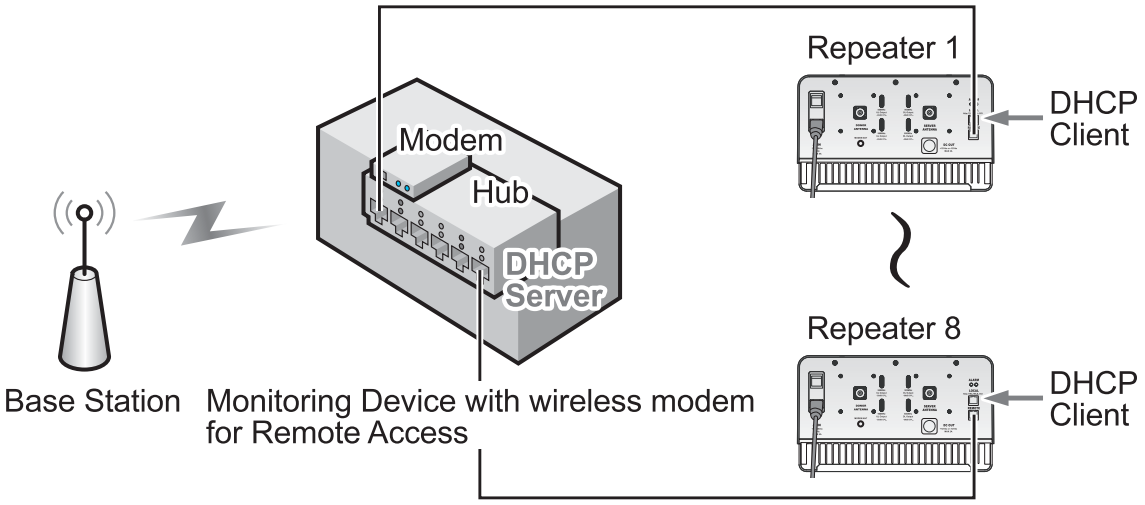
Step 2 Plug the power cord into a wall outlet.

Step 3 Power Switch turns on.

Step 4 Check if the green LED at the bottom turns on.

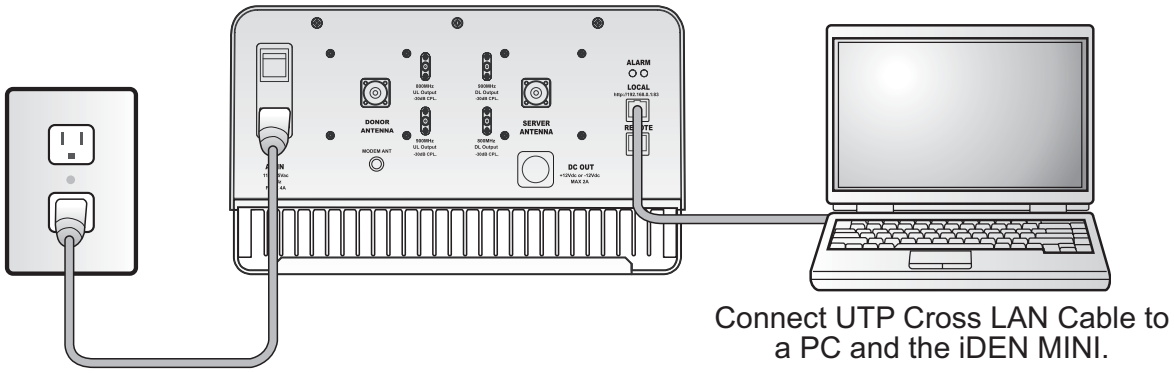


4.1 Connections



The remote port allows remote users to access the repeater through an external monitoring device.

Power on the switch to “I”
The switch is located on the bottom of the main body.



Connect UTP Cross LAN Cable to a PC and the iDEN MINI.

Local port provides on-site access to the repeater.

4. Operation

4.2 System Requirements

iDEN MINI operates on a customer provided PC based platform with the following system requirements :

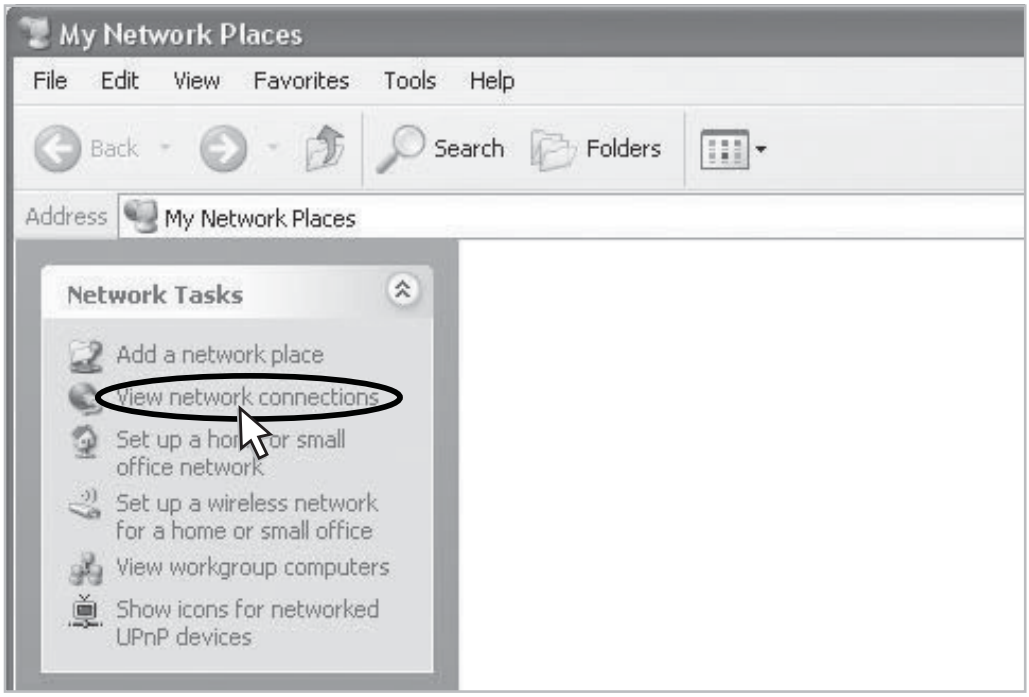
- Windows® 2000, Windows® XP or Windows® Vista
- Internet Explorer 6.0(Recommended) or higher
- 128 MB RAM or higher
- Pentium Ⅲ processor or higher
- RJ-45 jack required

4.3 Network Setup

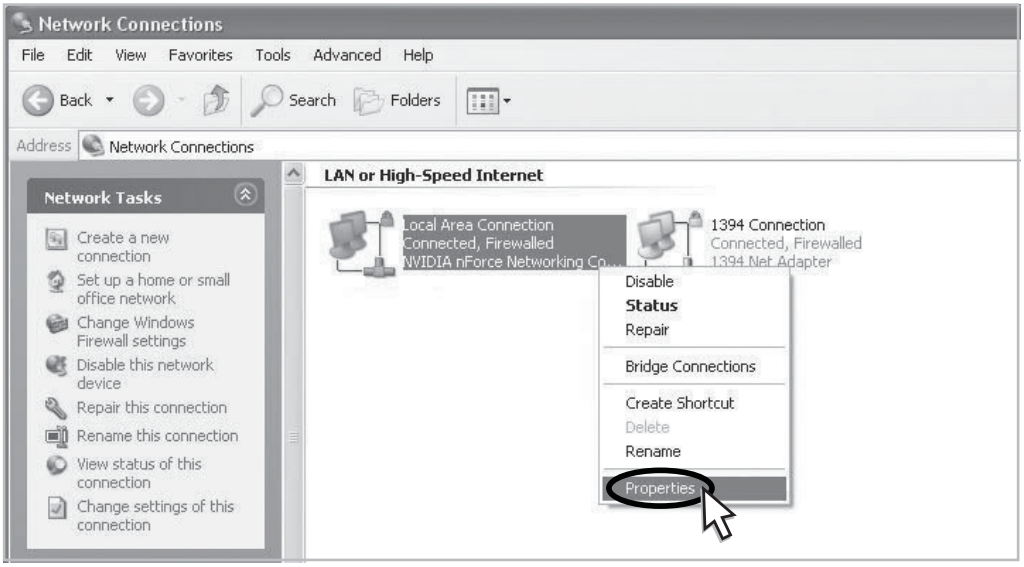
4.3.1 Windows XP

Step 1 Click the **Start** button and **My Network Places**.

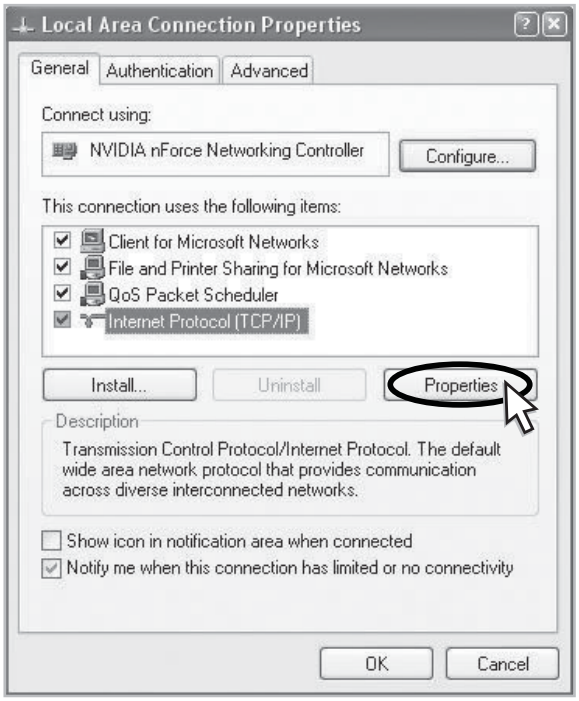
Step 2 Click **View network connections**.



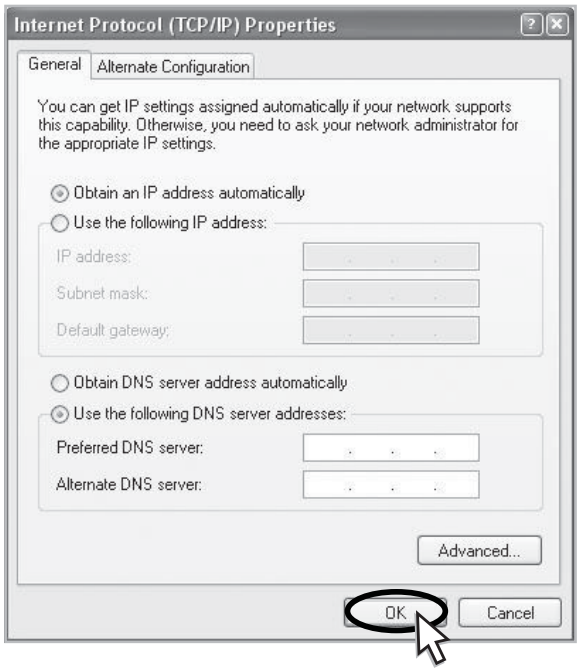
Step 3 Right-click **Local Area Connection** to see a shortcut menu and click **Properties**.



Step 4 Select **Internet Protocol (TCP/IP)** and click **Properties**.



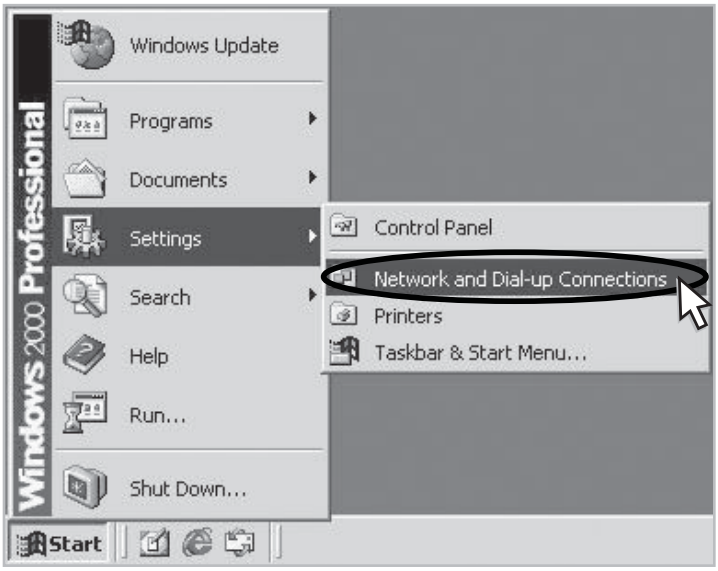
Step 5 Check **Obtain an IP address automatically** and click **OK**.



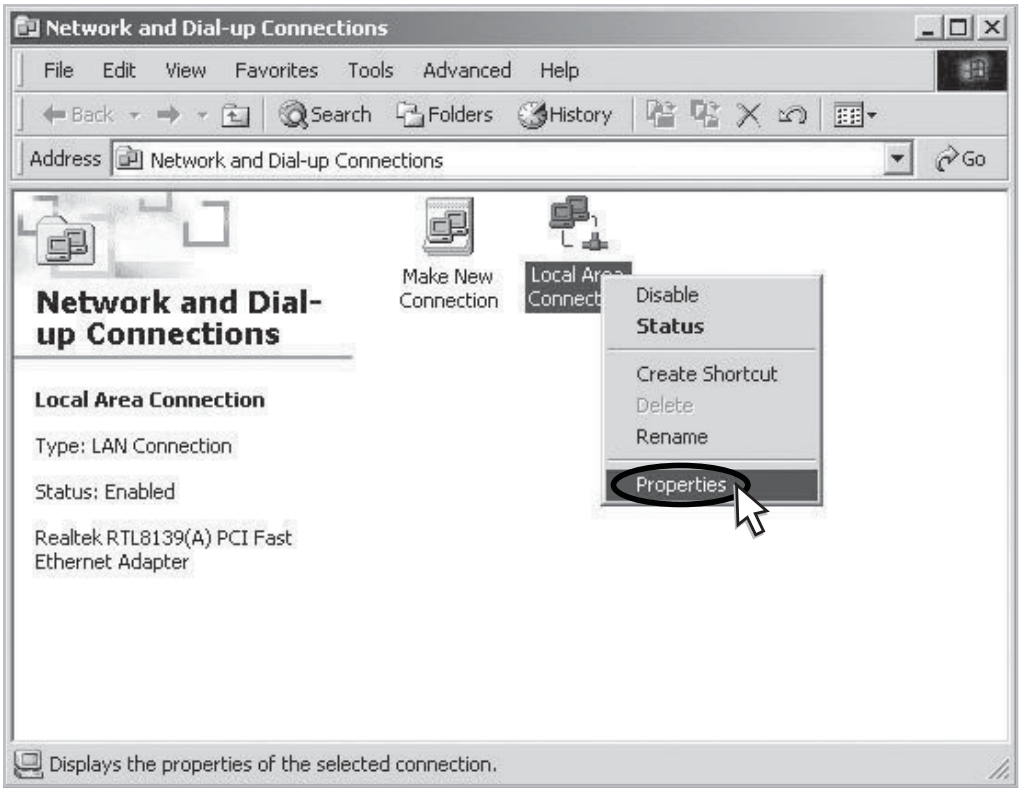
Step 6 Close all windows.

4.3.2 Windows 2000

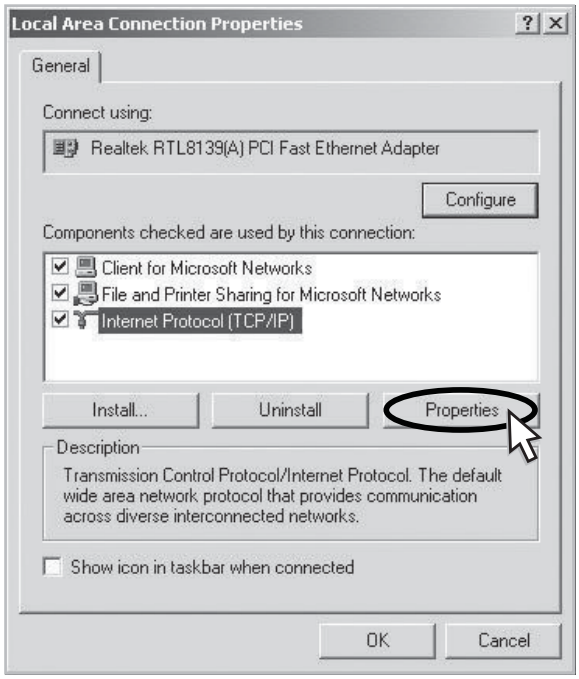
Step 1 Click the **Start** button, point to Settings, and then click **Network and Dial-up Connections**.



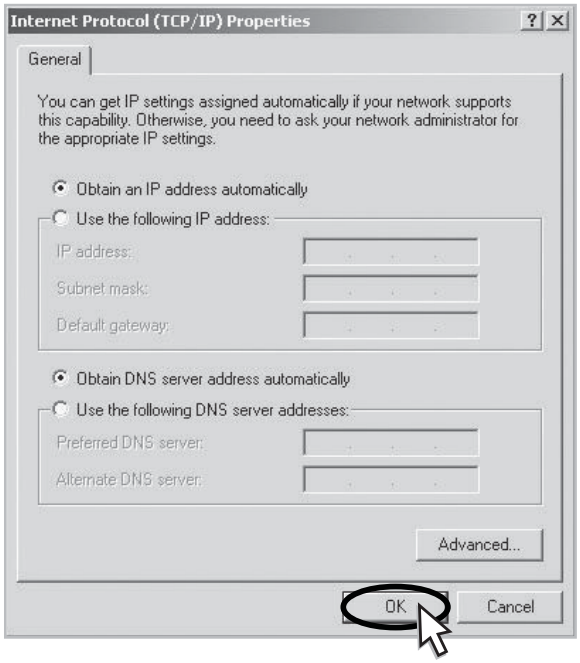
Step 2 Right-click **Local Area Connection** to see a shortcut menu and click **Properties**.



Step 3 Select **Internet Protocol (TCP/IP)** and click **Properties**.



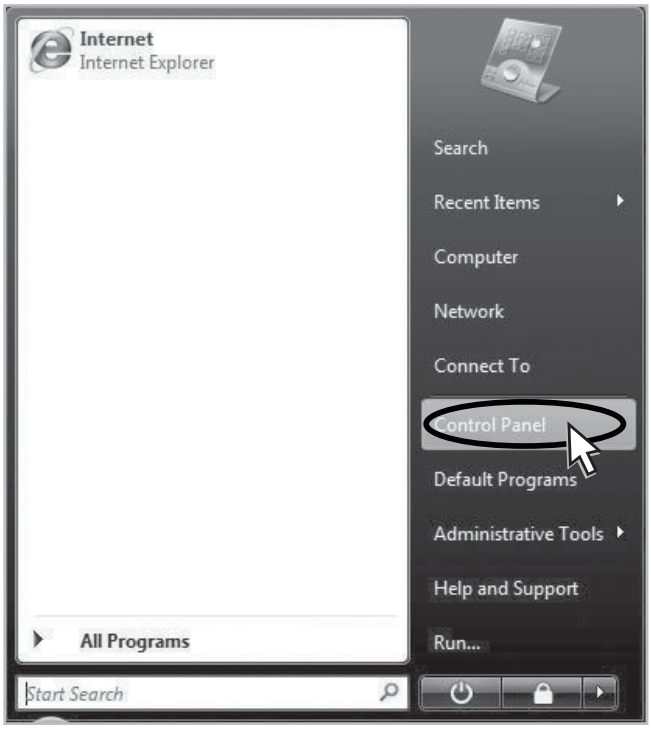
Step 4 Check **Obtain an IP address automatically** and click **OK**.



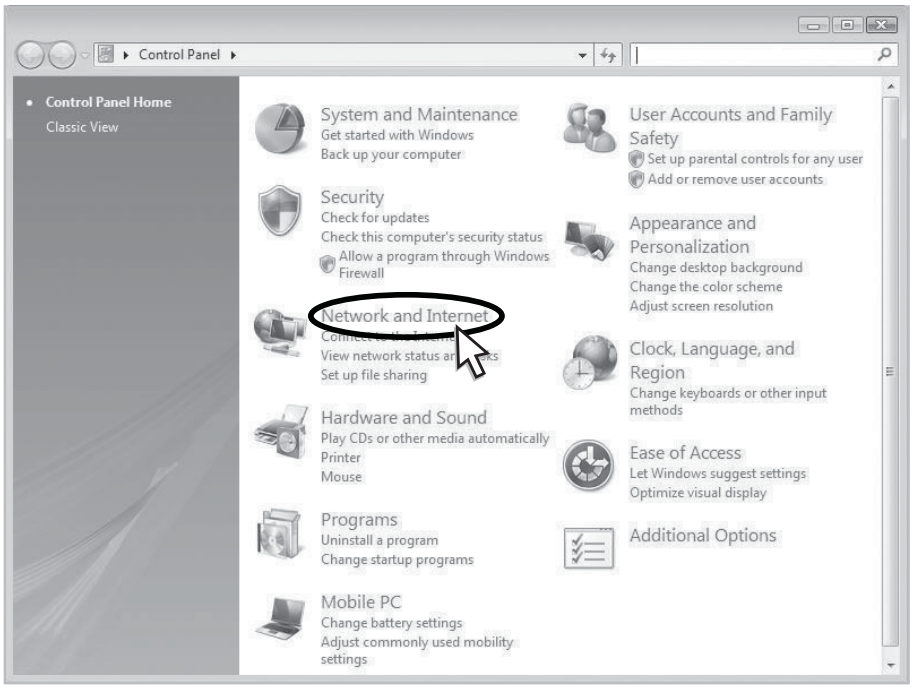
Step 5 Close all windows.

4.3.3 Windows Vista

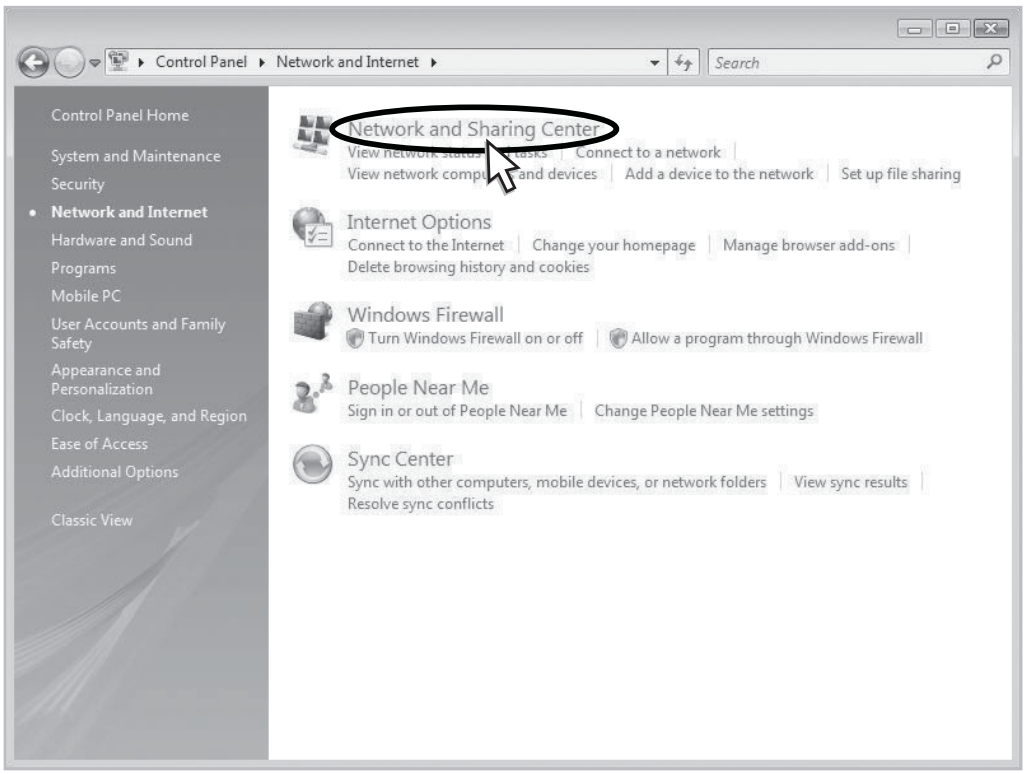
Step 1 Click the **Start** button and **Control Panel**.



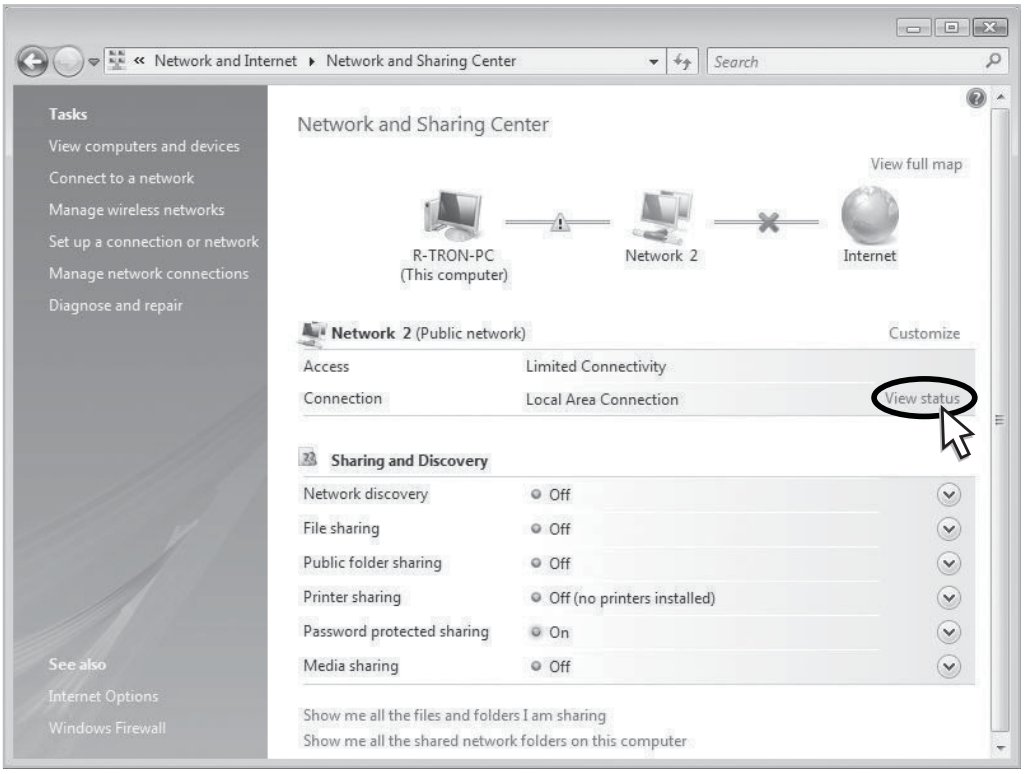
Step 2 Click **Network and Internet**.



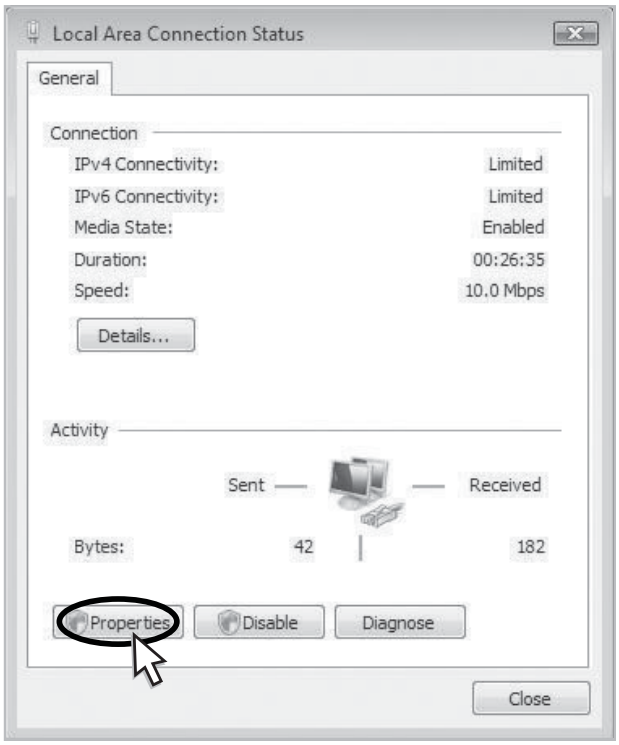
Step 3 Click **Network and Sharing Center**.



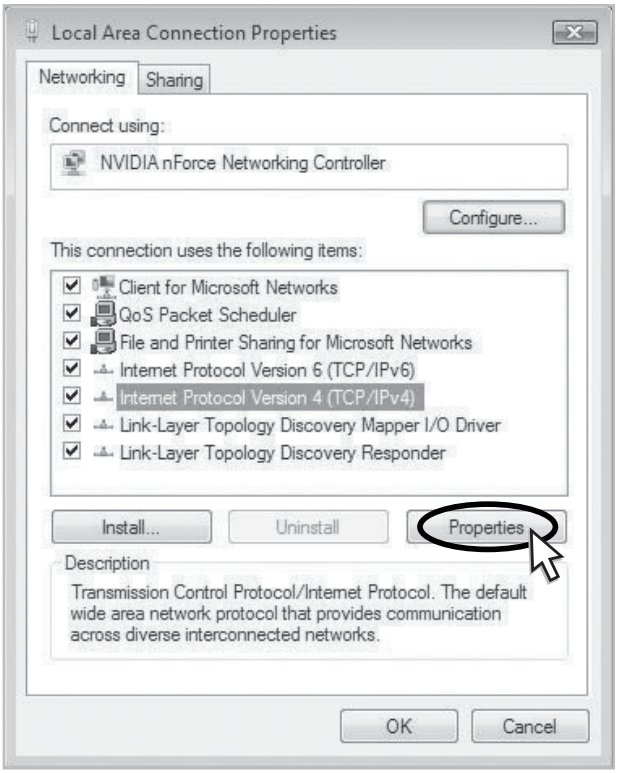
Step 4 Click **View status** of **Local Area Connection**.



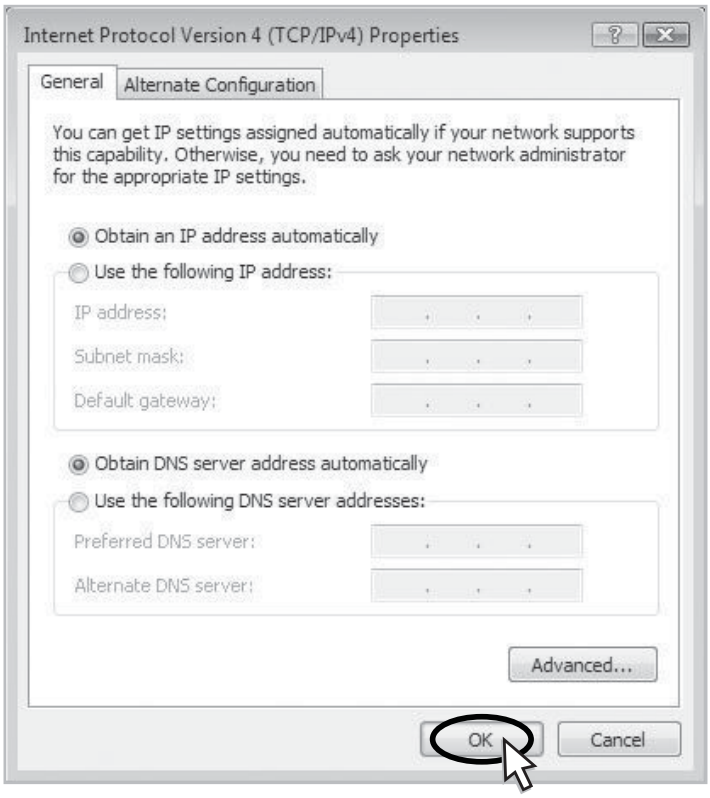
Step 5 Click **Properties** and a caution pop-up window will appear. Click **OK**.



Step 6 Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



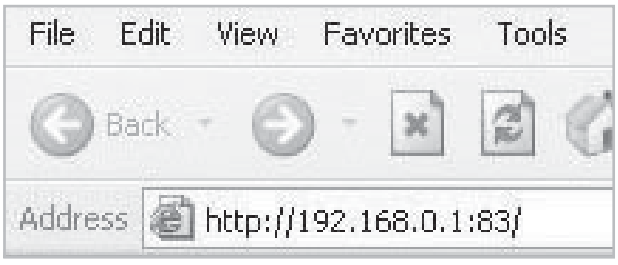
Step 7 Check **Obtain an IP address automatically** and click **OK**.



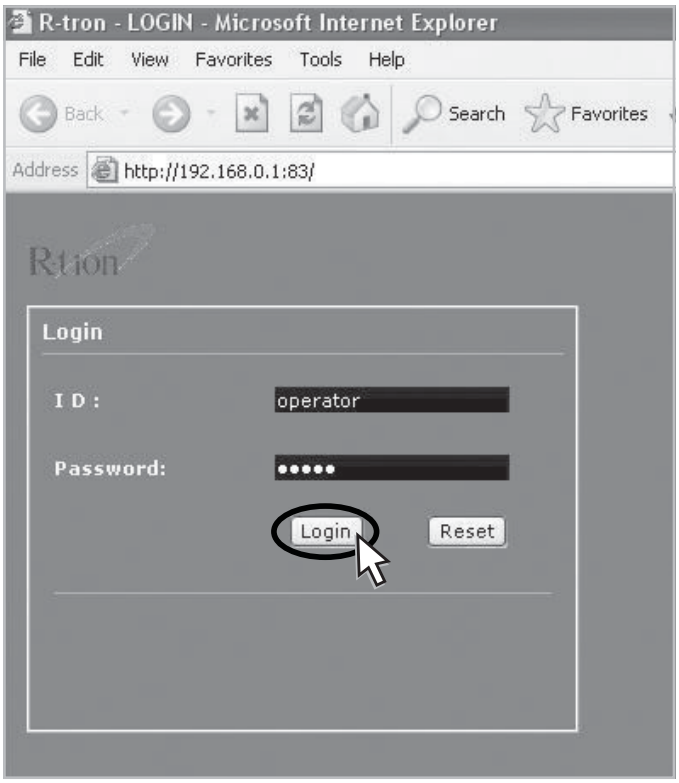
Step 8 Close all windows.

4.4 System Login

Step 1 Open your Web browser and type **"192.168.0.1:83"** into the URL address box. Then press the **Enter** key.



Step 2 The logon screen will appear. Type **"operator"** for the ID and **"rtron"** for the password and then click **OK**.



Step 3 The pop-up message for the login success will appear. Click **OK**.