2.2.4. MCU (Main Control Unit)

MCU is the control unit of iDEN MINI. It controls and monitors operational parameters. It also generates alarms, an event log and many other functions of the iDEN MINI.
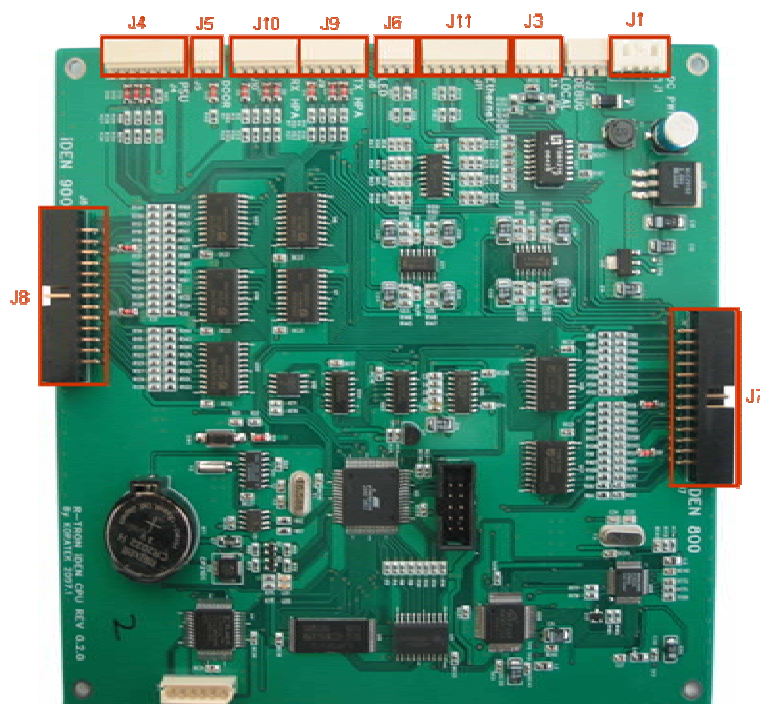

Figure 8.   Main Control Unit

Pin Map

Port	Connected to
J1	MCU Vcc(+12V)
J3	USB Port(Manufacturer use only)
J4	PSU Alarms
J5	Door Alarm
J6	Status LEDs
J7	iDEN 800 PLL,B/S,OUT DET
J8	iDEN 900 PLL,B/S,OUT DET
J9	Tx HPA
J10	Rx HPA
J11	RJ-45 port

2.2.5. Power Supply

The Power Supply Unit (PSU) supplies a steady DC power to iDEN MINI by drawing power from the general in-wall AC outlets.

Figure 9.   Power Supply

Specifications

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

2.2.6. HPAs (High Power Amplifiers)

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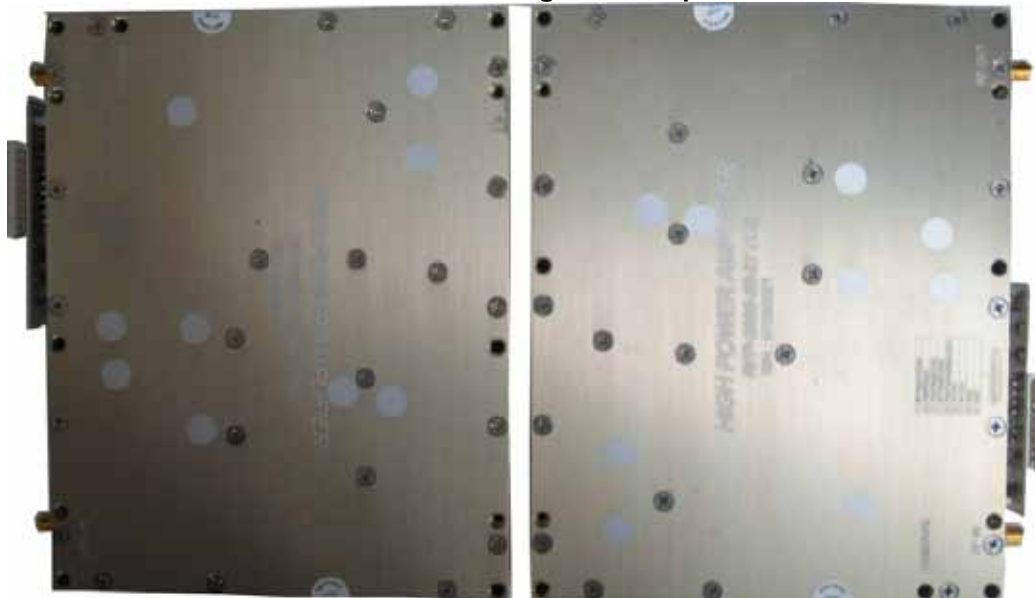

Figure 10.   HPAs(High Power Amplifiers)

3. Hardware Installation

The installation procedure is as follows:

- Check List of Items
- Mounting
- Grounding
- RF Connection
- Power up

3.1 Check List of Items

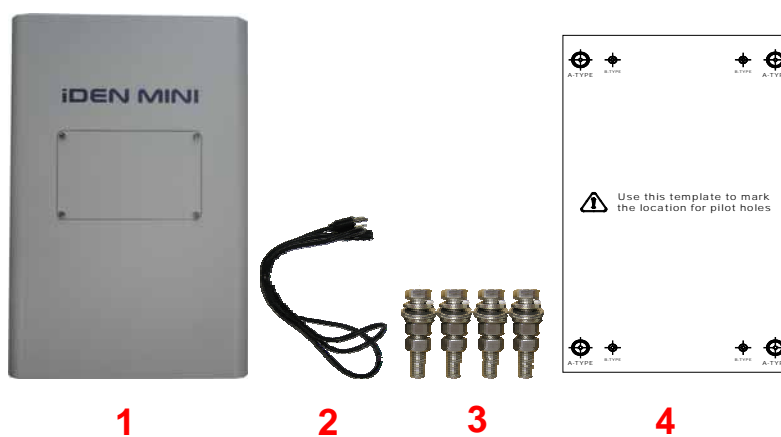| Index	Items	Q'ty
1	iDEN MINI	1
2	Power Cord	1
3	Screws for Mounting	4
4	Template for marking of the pilot holes	1

Items

Figure 11.   Items

3.2 Mounting

iDEN MINI is easy to mount using the assembled mounting bracket, which has Ø9 holes for the provided 5/16" fixing screws.

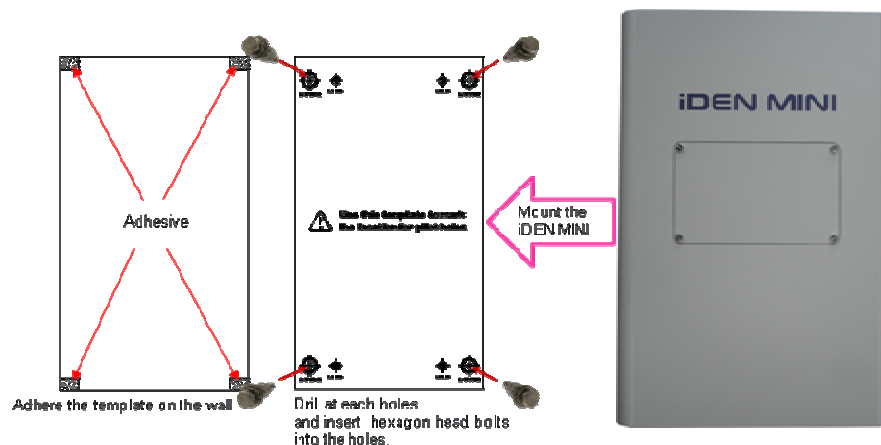*Figure 12.   Mounting*

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.

Step 3.   Mark with a pen for the holes and drill the marks or drill holes directly on the mark in the template.

Step 4.   Put the screws or bolts into the holes.

Step 5.   Mount the iDEN MINI on the right position.

⚠ **CAUTION**
Firmly affix the equipment on the wall of a building and Check necessary.

3.3 Grounding

> ⚠ **WARNING**
> Dangerously high voltages may occur and damage the equipment if the equipment is not grounded properly.

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

Figure 13.   Grounding

3.4 RF Cable Connection

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

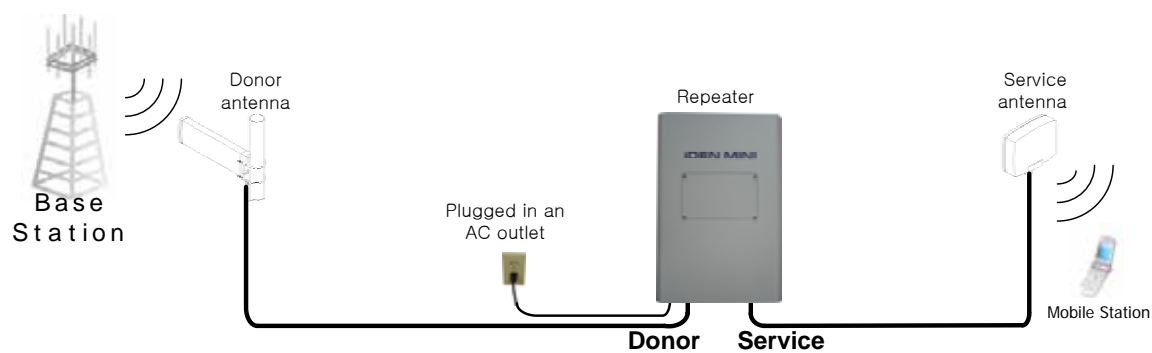**b.** Connect a cable from the **SERVICE ANTENNA** Port to a repeater's service antenna.

Figure 14.   Configuration: RF Cable Connection

3.5   Power Up

    a.   Connect the power cord.

    b.   Plug the power cord into a wall outlet.

    c.   Check if the green LED at the bottom turns on.

Figure 15.   Power Cord Connection

4. Command and Control through the Hyper Terminal

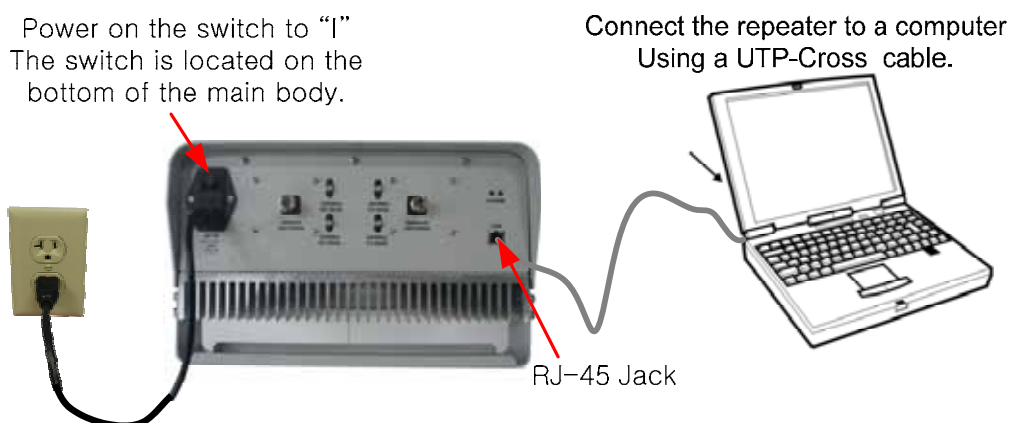## 4.1 Setting for Command and Control through the Hyper Terminal
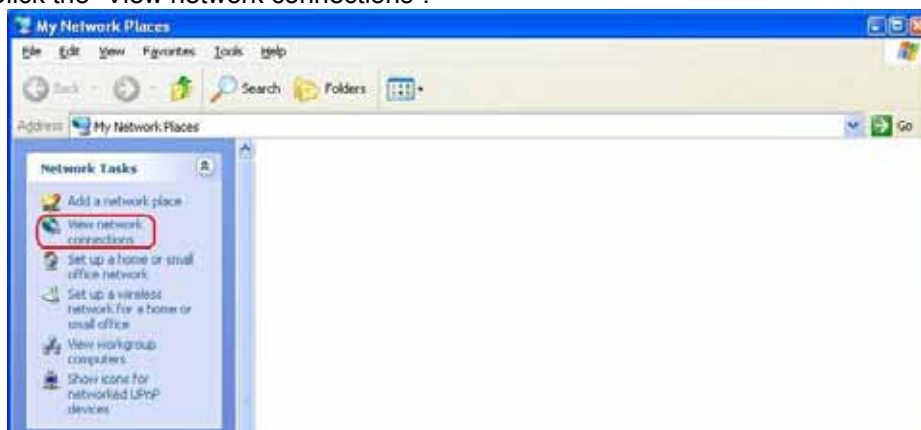

Figure 16.   Local connection to the iDEN MINI

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

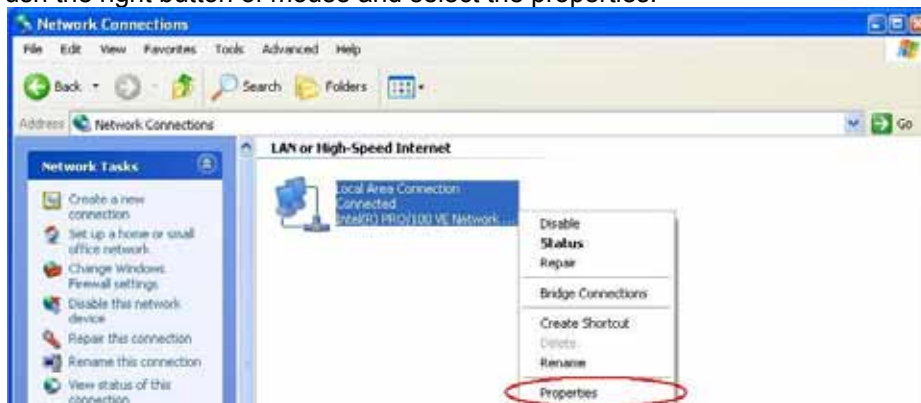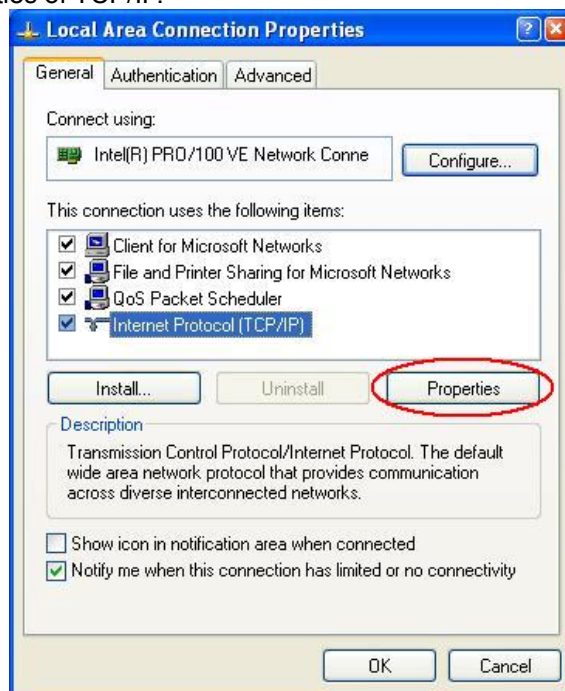|	
Windows® 2000 or Windows® XP	
128 MB RAM or more	
Pentium Ⅲ processor or more	keyboard
RJ-45 jack	

Step 1 Open My Network Places.

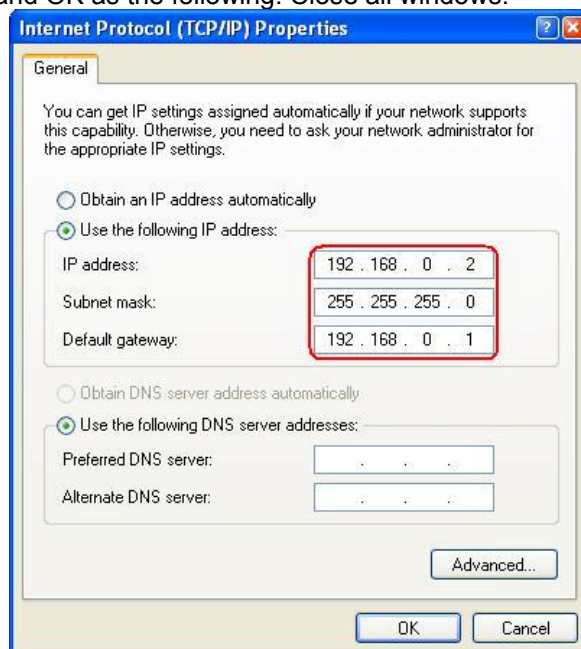Step 2 Click the "View network connections".

Step 3 Push the right button of mouse and select the properties.

Step 4 Click the properties of TCP/IP.

Step 5 Set the values and OK as the following. Close all windows.

Step 6 Execute the Hyper Terminal.

Step 7 Name the session and OK.

Step 8 Select the TCP/IP (Winsock).

Step 9 Set the values as the following and OK.

4.2 Command and Control through the Hyper Terminal

Step 1.   To see the current status, hit "Enter" key only.