

# **3560**

# **Bluetooth Access Point**

# **User's Guide**

(Apply to 8060/8360)

**Ver. 1.00**

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**Revision History**

|           |       |               |
|-----------|-------|---------------|
| 2003/6/13 | V1.00 | First Release |
|-----------|-------|---------------|

## Introduction

The **3560** Access Point is a unit that contains a Bluetooth radio module and acts as a bridge between **8060/8360** and 10/100BASE-T Ethernet. Bluetooth is a short-range wireless technology operating in the 2.4 GHz band. It enables devices to have the ability to form networks and exchange information. **3560** followed the **Bluetooth Network Encapsulation Protocol (BNEP)** to provide networking capability for **8060/8360** portable terminals. Each **3560** can allow up to 7 terminals to gain access to its services.

This document describes how to use **3560** to provide a networking service to **8060/8360**.

## Packing List

The **3560 Access Point** package includes the following:

1. A 3560 Access Point
2. An AC Adaptor

## Names of parts and their functions



| No. | Item                         | Description                           |
|-----|------------------------------|---------------------------------------|
| A   | LAN Status Indicator         | Flash, if LAN is working              |
| B   | Terminal Connected Indicator | Flash, if communicating with terminal |
| C   | Configuration Indicator      | ON, if enter configuration mode       |
| D   | Reset Switch                 | For entering default settings only    |
| E   | LAN Cable Connector          | LAN connector                         |
| F   | DC 5V Input                  | Power input connector                 |

| No. | Status                       | Configuration | Terminal Connected | LAN Status |
|-----|------------------------------|---------------|--------------------|------------|
| 1   | LAN Cable is OK              | ---           | ---                | Flash      |
| 2   | Switch Detecting             | ON 3 sec.     | OFF                | OFF        |
| 3   | Standby (No Terminal)        | ----          | ON                 | ----       |
| 4   | Standby (Terminal connected) | ----          | Flash fast         | ----       |
| 5   | Configuration On             | ON            | ----               | Flash      |
| 6   | User Mode Downloading        | Flash fast    | OFF                | Flash      |
| 7   | Kernel Mode                  | Flash slowly  | Flash slowly       | ----       |
| 8   | Kernel Mode Downloading      | Flash fast    | Flash slowly       | Flash      |
| 9   | Burn-in Mode(Internal Test)  | OFF           | Flash slowly       | ----       |
| 10  | Burn-in Mode Host Connected  | ON            | Flash slowly       | Flash      |
| 11  | Flash ROM Upgrading          | ON            | ON                 | ----       |

## Initial Configuration

1. Connect the **3560** to the LAN and turn on the power.
2. Run the Windows HyperTerminal program or any Telnet client application on the PC.
3. Open the TCP/IP(Winsock) connection with the **3560** IP and port 23
4. The default IP is **192.168.1.1**. User could use the default IP by using the method described in next section.
5. After connecting to the **3560**, the **3560** will be in configuration mode, the configuration indicator will be turned on and the following messages will be shown on HyperTerminal's window:

```
CipherLab 3560
MAC ID=00d017201111
Press [Enter] to Show Configuration Menu....
```

6. To configure the 3560, please press **[Enter]** and follow the dialog messages to complete the procedure.

```
*****
*   CipherLab 3560   *
* Configuration Menu *
*****
Kernel Version:3560K-1.00
Library Version:3560L-1.01
MAC ID=00d017201111
1)Configuration
2)Return to Default
3)Download Program
4)Download Kernel
5)Terminal List
```

## How to Connect to The 3560 with Default IP

Sometimes, user forgets the IP of **3560**, it is possible to use the default IP to setup or read the **3560** setting again.

1. Connect the **3560** to the LAN (no power supply yet).
2. Hold down the reset button and connect the adapter's DC jack to the **3560**.
3. Release the reset button after 3 seconds. The **3560** will be in default IP mode.

## Normal Installation

1. Insert the AC adapter into the outlet and connect its DC jack to the **3560**.
2. Connect the **3560** with the LAN cable.
3. Check the LAN Status Indicator on the **3560** to make sure that the LAN is working.
4. After 5 second, check the Terminal Connected Indicator on the **3560**.to make sure that the Bluetooth initialize is ok.

## Testing

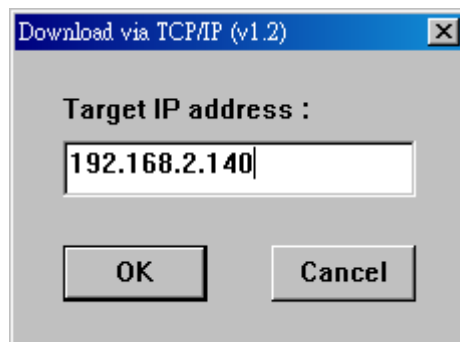
1. Make sure the 3560 is working and LAN is connected
2. Enter the system menu of **8060/8360** by pressing "7"+"9"+"POWER".
3. Enter BNEP menu and choose **[Inquiry]** item to search any Bluetooth devices around the **8060/8360**

4. Try to connect to the **3560** by pressing **[Enter]** in the inquiry result list.
5. If the result of connecting test in **[Inquiry]** menu is OK, it means every testing is fine. Otherwise, please check the hardware and software setting and try to connect again.

## Upgrade 3560 Firmware

There are two ways to upgrade 3560's firmware, one is enter configuration mode and choose **[Download Program]**, the other is download new program directly.

1. Make sure the **3560** is working and LAN is connected
2. Run the UDPLoad.exe on MS Windows OS.
3. Choose the file you wish to download.
4. Input the **3560**'s IP in the dialog box, such as following:

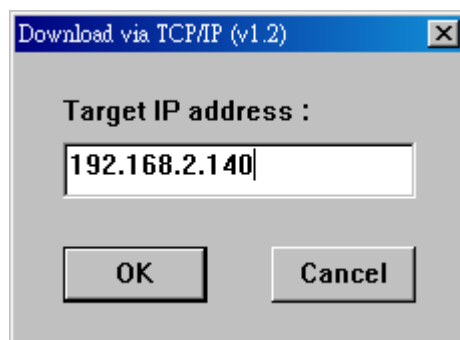


5. After downloading, the Configuration Indicator and the Terminal Connected Indicator on the **3560** will be turned on together. In the meantime, the program is writing to the flash ROM. **Do not remove the power when the indicators are ON.**
6. If the power is broken abnormally when flash ROM is upgrading, **3560** will lose the program and enter Kernel mode.

## Kernel Mode

Kernel mode is used to download new program once 3560 losing application.

1. Make sure the **3560** is work and LAN is connected
2. Run the UDPLoad.exe on MS Windows OS.
3. Choose the file you wish to download.
4. Input the **3560**'s IP in the dialog box, such as following:



5. After downloading, the Configuration Indicator and the Terminal Connected Indicator on

the 3560 will be turned on together. In the meantime, the program is writing to the flash ROM. **Do not remove the power when the indicators are ON.**

6. If the power is broken abnormally when flash ROM is upgrading, **3560** will lose the program anymore and return Kernel mode.

## Cautions

1. Do NOT install the unit close to metallic surfaces or devices.
2. Do NOT install or store the unit in a humid or dusty place.

## Specification

| Model Name                         | 3560                                   |
|------------------------------------|--|
| Bluetooth Profile Supported        | PAN                                    |
| Interface                          | 10/100BaseT/ RJ11                      |
| Power                              | 5V DC                                  |
| Clients profile requirement        | PAN                                    |
| Standard                           | Bluetooth v1.1                         |
| Frequency Band                     | 2.4GHz to 2.483GHz unlicensed ISM band |
| Transmission Range (line of sight) | 250m                                   |
| Operating Temp.                    | 0° C to 45° C                          |
| Humidity                           | 5 to 90 %                              |
| Connections                        | Up to 7 slaves for data connection     |
| Certification                      | CE/FCC                                 |

### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### **INFORMATION TO USER:**

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.