

# BVP 8770

## *User's Manual*



 **Leadtek®**  
We Make Dreams a Reality

Copyright © 2002 Leadtek Research Inc. All rights reserved.

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of Leadtek Research Inc.

Leadtek makes no warranties with respect to this documentation and disclaims any implied warranties of merchantability, quality, or fitness for any particular purpose. The information in this document is subject to change without notice. Leadtek reserves the right to make revisions to this publication without obligation to notify any person or entity of any such changes.

Trademarks or brand names mentioned herein are trademarks or registered trademarks of their respective owners.

### **International Headquarters**

18th Fl., 166, Chien-Yi Rd., Chung Ho, Taipei Hsien, Taiwan (235)  
Phone: +886 (0)2 8226 5800 Fax: +886 (0)2 8226 5801  
<http://www.leadtek.com.tw> E-Mail: [service@leadtek.com.tw](mailto:service@leadtek.com.tw)

### **United States Headquarters**

46732 Lakeview Blvd., Fremont, CA 94538, U.S.A.  
Phone: +1 510 490 8076 Fax: +1 510 490 7759  
<http://www.leadtek.com>

### **Europe Headquarters**

Antennestraat 16 1322 AB, Almere, The Netherlands  
Phone: +31 (0)36 536 5578 Fax: +31 (0)36 536 2215  
<http://www.leadtek.nl>

**BVP 8770 User's Manual**  
**Version C**  
**April 2002**

**P/N: W0500596**

# Table of Contents

<b>1</b>	<b>Getting Started .....</b>	<b>1</b>
	Overview .....	1
	Feature highlights .....	1
	What's in the Package .....	2
<b>2</b>	<b>Getting to Know your BVP 8770 .....</b>	<b>3</b>
	Front view .....	3
	Rear view .....	6
	Side view .....	6
<b>3</b>	<b>Installation .....</b>	<b>7</b>
	Installing the unit .....	7
	Using external devices .....	9
<b>4</b>	<b>System Setup .....</b>	<b>10</b>
	Common Settings .....	10
	ADSL/Constant ADSL/Single, Public, & Fixed IP .....	11
	<i>When the IP is used exclusively by BVP 8770 .....</i>	<i>11</i>
	<i>When the IP is shared with other devices (with a DHCP</i>	
	<i>server connected) .....</i>	<i>12</i>
	<i>When the IP is shared with other devices (without a DHCP</i>	
	<i>server connected) .....</i>	<i>13</i>
	ADSL/Constant ADSL/Multiple, Public, & Fixed IP ...	14
	<i>When BVP 8770 uses one of the IPs (with a DHCP server</i>	
	<i>connected) .....</i>	<i>14</i>
	<i>When BVP 8770 uses one of the IPs (without a DHCP</i>	
	<i>server connected) .....</i>	<i>15</i>
	<i>When one of the IPs is shared with other devices (with</i>	
	<i>a DHCP server connected) .....</i>	<i>16</i>
	<i>When one of the IPs is shared with other devices (without</i>	
	<i>a DHCP server connected) .....</i>	<i>17</i>

# Table of Contents

ADSL/Timing ADSL .....	18
<i>When the ADSL is used exclusively by BVP 8770 .....</i>	18
<i>When the ADSL is shared with other devices (with a DHCP server connected) .....</i>	19
<i>When the ADSL is shared with other devices (without a DHCP server connected) .....</i>	20
Cable .....	21
<i>When the IP is used exclusively by BVP 8770 .....</i>	21
<i>When the IP is shared with other devices (with a DHCP server connected) .....</i>	22
<i>When the IP is shared with other devices (without a DHCP server connected) .....</i>	23
LAN/No Firewall or NAT .....	24
<i>With a DHCP server connected .....</i>	24
<i>Without a DHCP server connected .....</i>	25
LAN/NAT .....	26
<i>With a DHCP server connected .....</i>	26
<i>Without a DHCP server connected .....</i>	27
LAN/Firewall with Packet Filter .....	28
<i>With a DHCP server connected .....</i>	28
<i>Without a DHCP server connected .....</i>	29
LAN/Firewall with NAT & Packet Filter .....	30
<i>With a DHCP server connected .....</i>	30
<i>Without a DHCP server connected .....</i>	31
<b>5 Working with a Gatekeeper .....</b>	<b>32</b>
<b>6 Making a Call .....</b>	<b>33</b>
Before making a video call .....	33
Making a video call .....	34

# Table of Contents

<b>7</b>	<b>Making Adjustments .....</b>	<b>35</b>
	Using OSD menus .....	35
	Configuration .....	36
	Password Checking .....	36
	System Setup .....	37
	Bandwidth Setup .....	41
	Remote Update .....	42
	Configuration Changed .....	44
	Password .....	45
	Change Password .....	45
	Phonebook .....	46
	Add .....	46
	Search .....	47
	InBox .....	52
	OutBox .....	53
	Copyright Information .....	54
	Restore factory settings .....	55
<b>8</b>	<b>OSD Menu Tree .....</b>	<b>56</b>
<b>9</b>	<b>Trouble Shooting .....</b>	<b>57</b>
	Error messages in bootup sequence .....	57
	Error messages in changing System Setup Settings .....	58
	Other problems .....	60
<b>10</b>	<b>Tech Support .....</b>	<b>61</b>
<b>11</b>	<b>Limited Warranty .....</b>	<b>62</b>
<b>12</b>	<b>FCC Statement .....</b>	<b>63</b>

# 1 Getting Started

## Overview

Leadtek BVP 8770 is designed to avoid complicated installation. And with the buttons on the keypad, you are able to access the user-friendly on screen display menu (OSD), easily control the functions and make adjustments.

The BVP 8770 has a built-in high quality CCD camera and an active matrix liquid crystal display. Images are transmitted through the Internet at up to 24 frames per second (fps) (@ CIF resolution). While making a video call, you can enjoy the brilliant real-time color images of yourself, your correspondents or both. If you do not want your image to display on the caller or receiver's screen, BVP 8770's private mode can do just that.

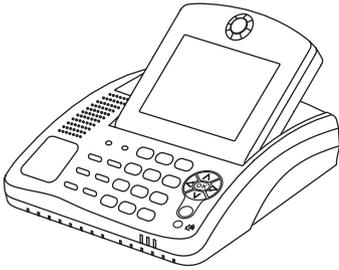
The BVP 8770 is fully compliant with H.323 international standards for video communication. It can be used with any video phone that are compatible with this standard.

## Feature highlights:

- Broadband IP Address video phone
- Connect the other video phone by simply entering the IP address/number\*
- Built-in high quality CCD camera with cover protection and focus adjustment knob
- High quality TFT LCD display
- Friendly and easy operation through keypads
- Phone book dialing function
- 2 A/V inputs & 1 A/V output for additional video/audio input and video/audio output for large display
- Up to 24 frames per second video display (@ CIF resolution)
- Video selectable and picture image up to VHS quality
- Echo-cancellation and no delay high quality audio

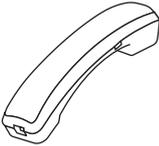
***\*Note: To dial numbers, BVP 8770 must work in conjunction with additional accessories, such as the H.323 Gatekeeper.***

# What's in the package?

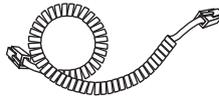


BVP 8770

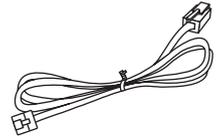
- ☑ BVP 8770 x1
- ☑ Handset x1
- ☑ User's Manual x1
- ☑ Handset Cable x1
- ☑ Power Adapter x1
- ☑ Power Cord x1
- ☑ Ethernet Cable (RJ-45) x1
- ☑ Audio/Video Cable x1



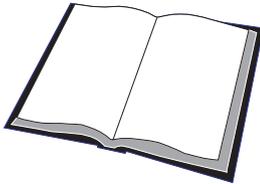
Handset



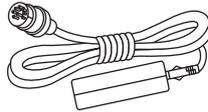
Handset Cable



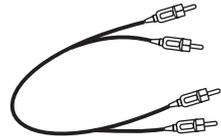
Ethernet Cable



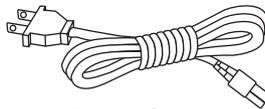
User's Manual



Power Adapter



Audio/Video Cable



Power Cord



Please unpack the product package with caution; inspect the Items closely. If you find any damaged item, please contact your local distributor immediately. Also, please keep the box and packing material for future use in the event of future shipments.

# 2 Getting to Know Your BVP 8770

## Front view

**CCD Camera:**  
The input source of local video image. This is a mini built-in CCD camera.

**Focus Adjusting Knob:** on outer ring of the camera.

**Brightness and Hue:** These two knobs are for adjusting the brightness and hue of the images on the LCD screen.

**LCD Screen:**  
shows the video images of callers.

**Speaker**

**Handset**

**Video indicator:**  
Lights orange when the main unit is in video transmission.

When BVP 8770 is in audio mute, the video indicator blinks.

**Handset Cable**

**Mic.**

**Power indicator:**  
Lights green when the power is on. The light blinks when the power saving function is on. The power saving function activates when the system is inactive for five minutes.

**Hot Keys:**  
See next page.

**Keypad:**  
To enter the IP address or to input data required for accessing the OSD menu.

**Cursor Panel:**  
See next page.

## Front view (cont.'d)

### Cursor Panel

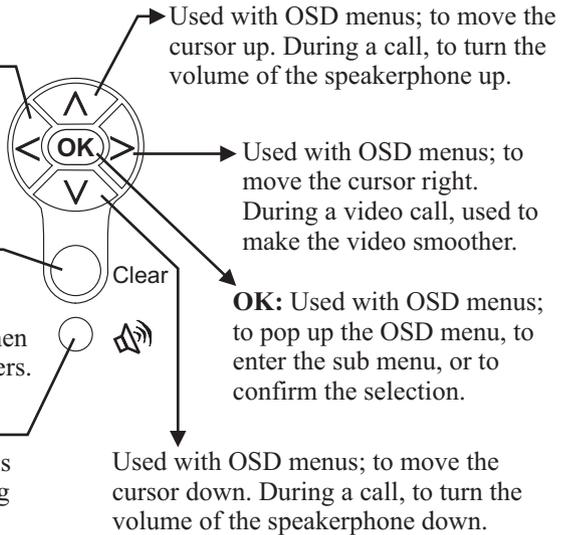
Used with OSD menus; to move the cursor left. During a video call, used to make the video sharper.

### Clear:

Used to go back to the previous menu, or to function as Backspace when you input letters or numbers.

### Hands free:

To dial the correspondent's IP address without picking up the handset.



## Hot Keys

### View:

To select how local and remote video is displayed on the screen. The options are: Remote, PIP upper-left, PIP lower-left, PIP upper-right, PIP lower-right, Local. And it switches in that sequence.

### Still:

To freeze the video image of yourself so that the other party can have a clearer display.

**Phonebook:**  
See page 46.

*\*Note: To dial numbers, BVP 8770 must work in conjunction with additional accessories, such as the H.323 Gatekeeper.*

### Privacy:

Stop sending your image to the other side so that you will not be seen by the person you talk to.

### Camera:

To switch between the built-in CCD camera and external cameras connected to BVP 8770.

### Mute/Redial:

During a video call, this button is used to mute the audio so that you will not be heard by the other party on the phone; when there is no connection, to redial the IP address/number\* last dialed.

# Front view (cont.'d)

## Numeric Keypad

### Inputting numbers

Pressing any key on the numeric keypad can input the correspondent number.

For example, pressing  will generate the number " 8 ".

### Inputting letters

Every button on the numeric keypad has characters printed on it, in addition to the numbers. Number keys from " 2 " to " 9 " have English letters on them, so they can be used to input English letters.

When inputting data, pressing a key consecutively will generate the letters on it. For example,  has the number " 7 " and the alphabets " PQRS " on it.

Pressing this key once will generate the number " 7 ".

Pressing this key twice consecutively will generate the letter " P ".

Pressing this key three times consecutively will generate the letter " Q ".

Pressing this key four times consecutively will generate the letter " R ".

Pressing this key five times consecutively will generate the letter " S ".

Ant it will cycle in such order.

### Inputting punctuation marks

The keypad provides four punctuation marks:

" . " , " " ! " and " ; ".

" . ": Press  twice consecutively;

**Press only once to generate " . " when inputting IP addresses.**

" , ": Press  three times consecutively.

" ! ": Press  twice consecutively.

" ; ": Press  three times consecutively.

### Inputting special characters

The keypad also provides six special characters: " @ " , " \_ " , " - " , " \* " , " \$ " and " # ".

" @ ": Press  twice consecutively;

" \_ ": Press  three times consecutively.

" - ": Press  four times consecutively.

" \* ": Press  once.

" \$ ": Press  4 times.

" # ": Press  once.



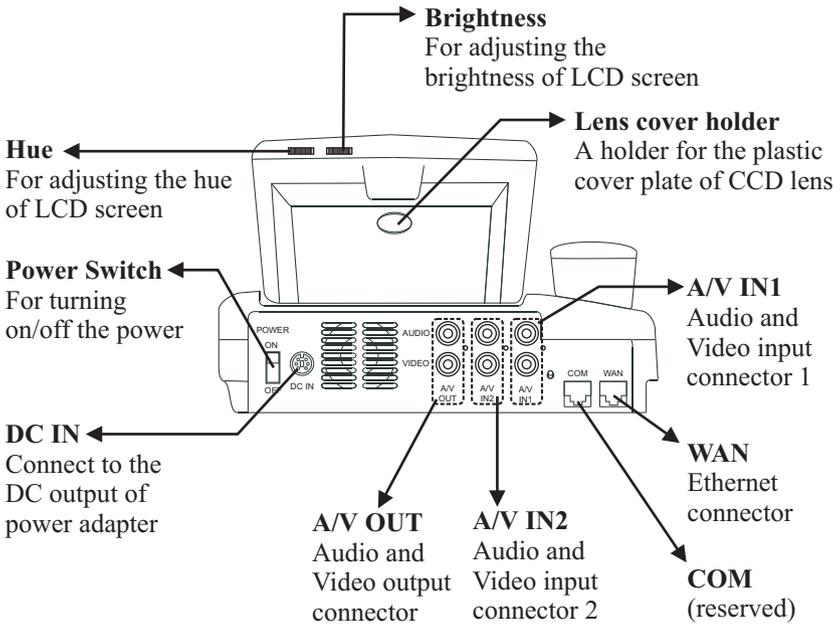
Numeric Keypad



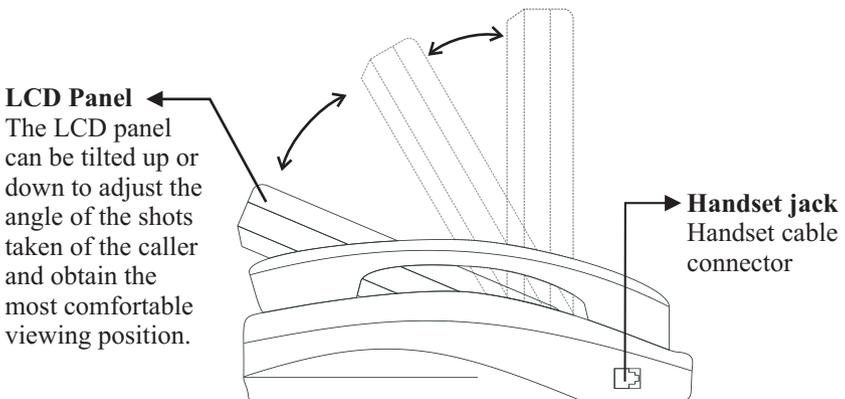
### Switching between upper case and lower case letters

Press  once to switch between upper and lower case letters when inputting data.

## Rear view



## Side view



# 3 Installation

## Installing the unit

### Step 1 Pick a good spot

#### **Stability**

Place your BVP 8770 on top of a counter, desk, or table with the CCD camera opening in front.

#### **Lighting Condition**

Make sure the lighting is sufficient and does not shine directly into camera lenses.

#### **View of camera**

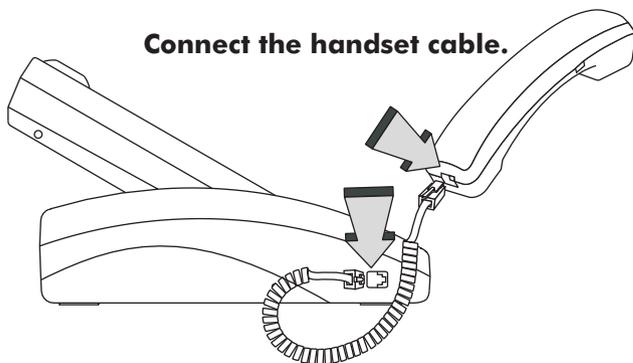
Avoid using BVP 8770 in a room with brightly painted walls or flamboyant wallpaper. Soft and evenly painted background provides the best results.

#### **Prolonging the lifespan**

Avoid storing or operating BVP 8770 in abnormal conditions. High temperatures or excessive humidity could cause the unit to malfunction and shorten its useful lifespan.

### Step 2 Hook up the handset

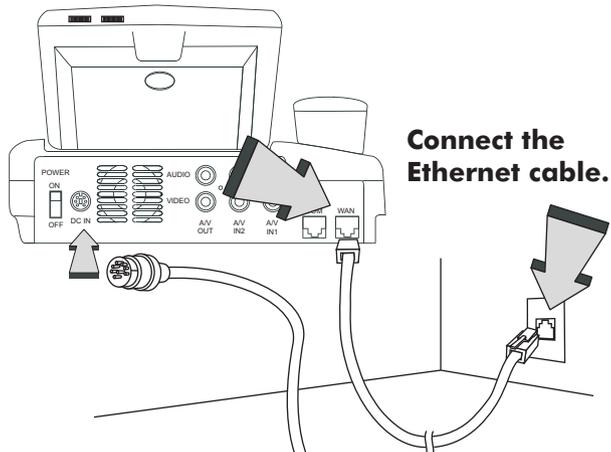
Connect the handset and the BVP 8770 main unit with handset cable.



# Installing the unit

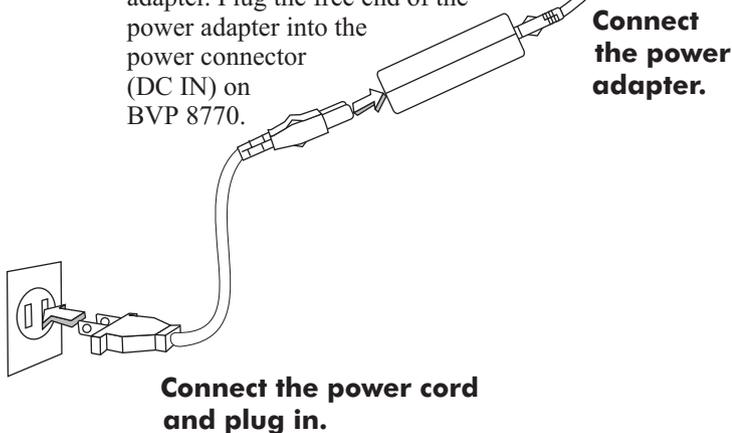
## Step 3 Connect the Ethernet cable

Plug one end of the Ethernet cable in the jack marked "WAN" on BVP 8770. Plug the other end of the Ethernet cable in the RJ-45 jack on the wall.

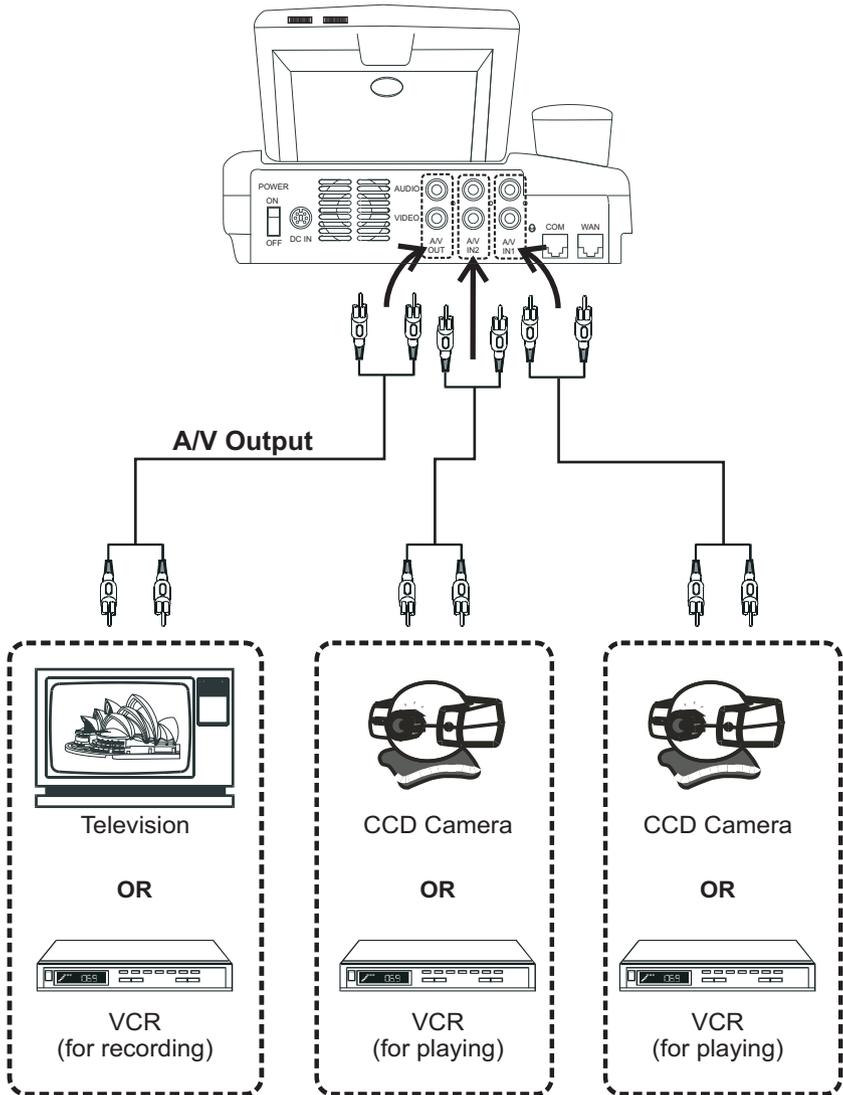


## Step 4 Plug in for power

Connect the power cord between the wall outlet and the power adapter. Plug the free end of the power adapter into the power connector (DC IN) on BVP 8770.

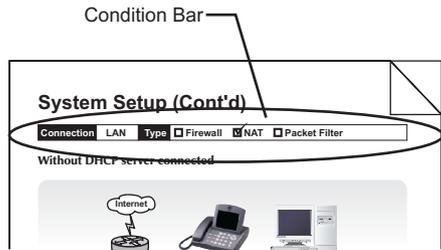


# Using external devices



# 4 System Setup

The System Setup section gives instructions on how to set up your BVP 8770 system under some mostly used interconnection types. There is a condition bar on each page (as shown in the figure), indicating what type of connection the setup guide on that page is for. Look for the type of connection you use with your BVP 8770 to find the setup instructions you need.

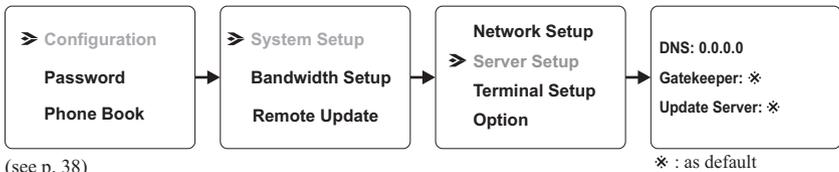


Other than the settings that vary in different interconnections. There are some common settings that should be done under in type of connection. Detailed information is as follows:

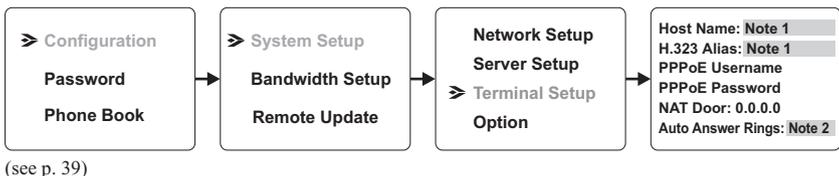
## Common Settings

The following settings need to be done by users with any type of connection.

### Server Setup



### Terminal Setup



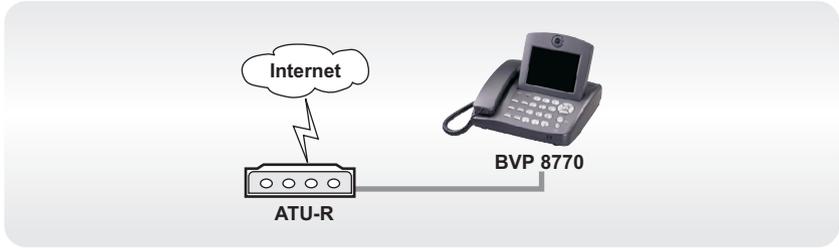
Note:

1. Host name and H.323 Alias are for terminal identification. The default settings are the same in all units. Therefore, you must change them.
2. You can set the number of rings before the system picks it up under the Auto Answer mode. The default is 4.

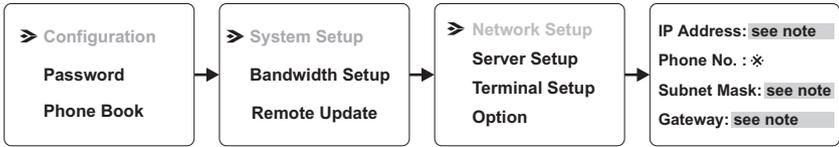
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Single, Public, & Fixed

When the IP is used exclusively by BVP 8770



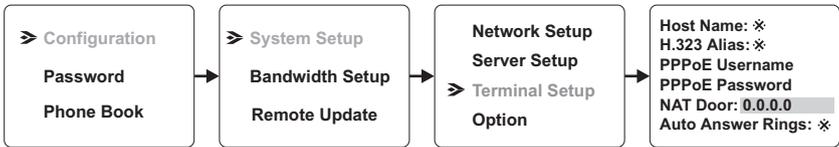
## BVP 8770 System Setup



(see p. 37)

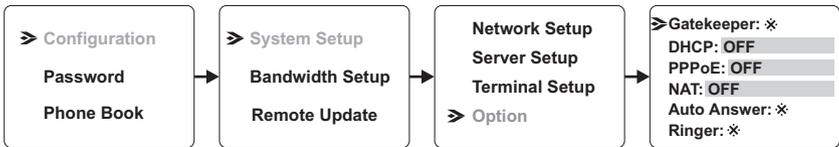
\* : as default

**Note :** IP address, Subnet Mask and Gateway are assigned by your ISP, each consisted of 4 sets of numbers with dots in between them. Check with your ISP for the information.



(see p. 39)

\* : as default



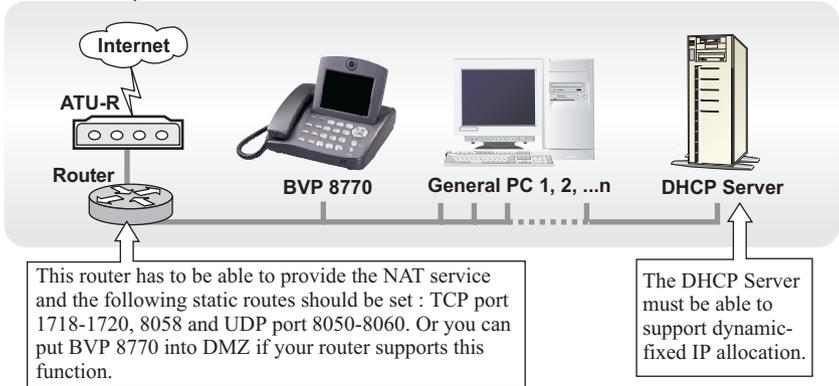
(see p. 40)

\* : as default

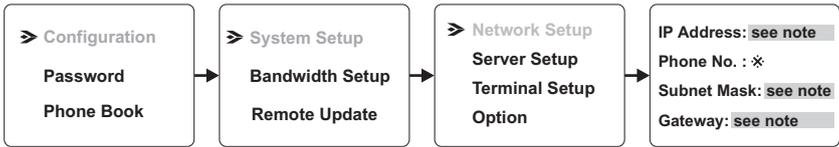
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Single, Public, & Fixed

When the IP is shared with other devices (with a DHCP server connected)



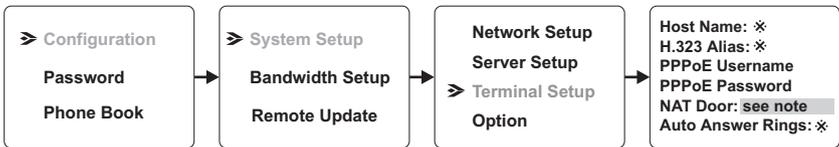
## BVP 8770 System Setup



(see p. 37)

\* : as default

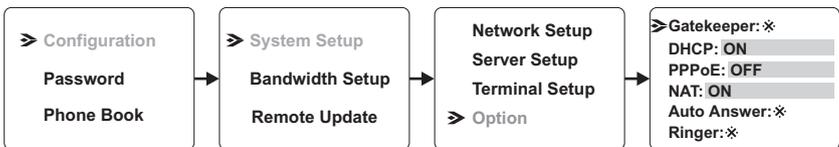
**Note** : IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

\* : as default

**Note** : The NAT door is the public IP of your router and this IP is assigned by your ISP.



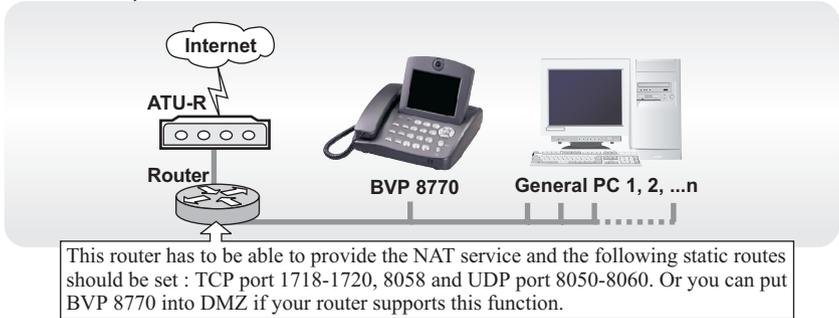
(see p. 40)

\* : as default

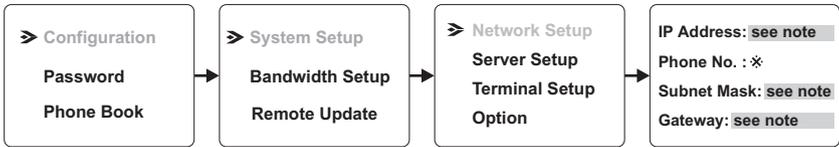
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Single, Public, & Fixed

**When the IP is shared with other devices (without a DHCP server connected)**



## BVP 8770 System Setup



(see p. 37)

\* : as default

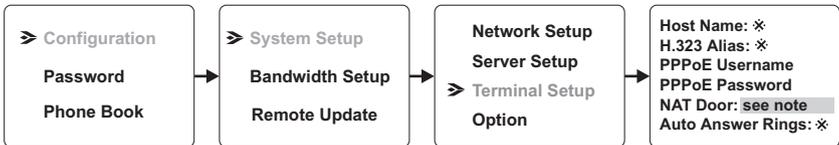
**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment.

If the segment is 172.16.0.0-172.16.0.255, your settings should be:

**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

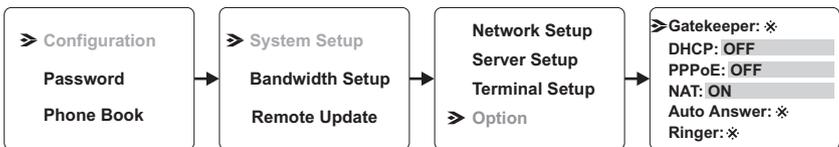
**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



(see p. 39)

\* : as default

**Note :** The NAT door is the public IP of your router and this IP is assigned by your ISP.



(see p. 40)

\* : as default

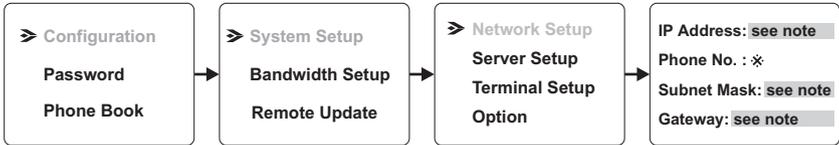
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Multiple, Public, & Fixed

When BVP 8770 uses one of the IPs (with a DHCP server connected)



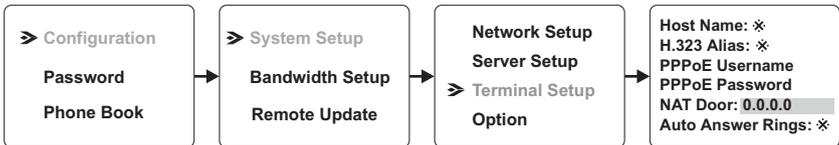
## BVP 8770 System Setup



(see p. 37)

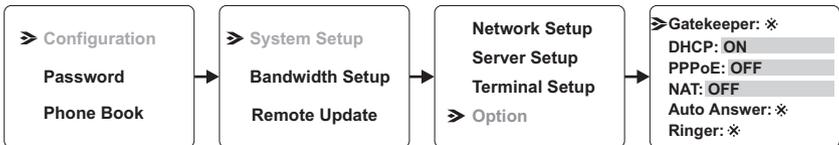
\* : as default

**Note :** IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

\* : as default



(see p. 40)

\* : as default

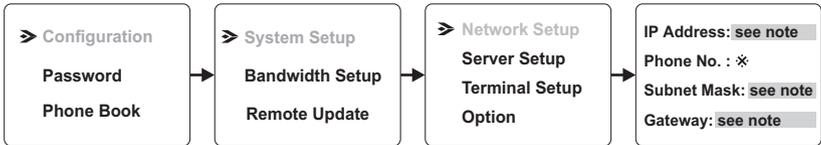
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Multiple, Public, & Fixed

When BVP 8770 uses one of the IPs (without a DHCP server connected)



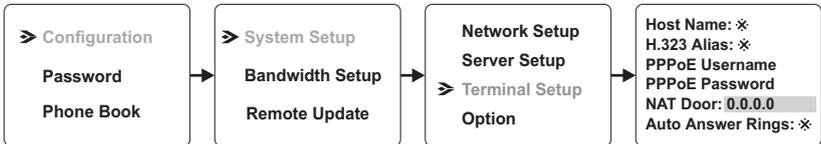
## BVP 8770 System Setup



(see p. 37)

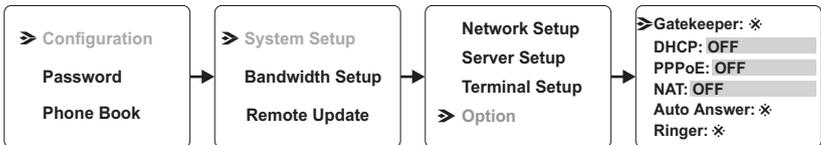
\* : as default

**Note :** IP address, Subnet Mask and Gateway are assigned by your ISP, each consisted of 4 sets of numbers with dots in between them. Check with your ISP for the information.



(see p. 39)

\* : as default



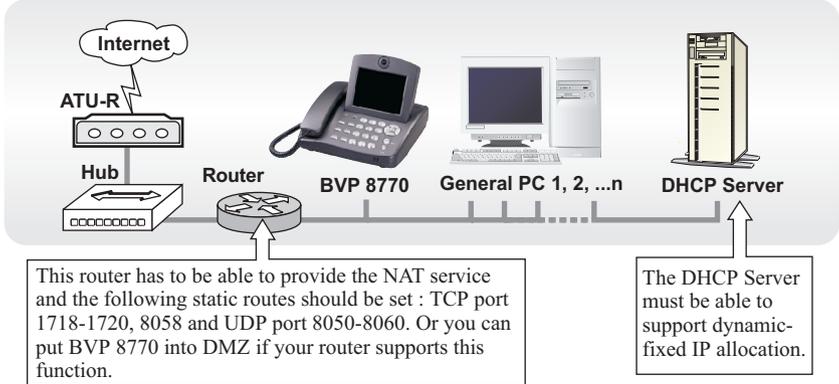
(see p. 40)

\* : as default

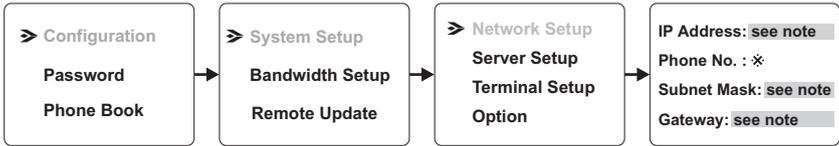
# System Setup (Cont'd)

**Connection** ADSL    **Type** Constant ADSL    **IP** Multiple, Public, & Fixed

**When one of the IPs is shared with other devices (with DHCP server connected)**



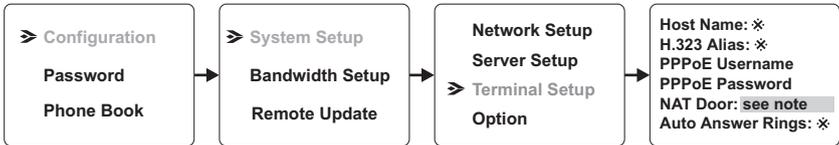
## BVP 8770 System Setup



(see p. 37)

\* : as default

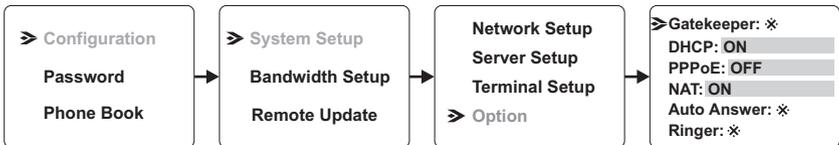
**Note** : IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

\* : as default

**Note** : The NAT door is the public IP of your router and this IP is assigned by your ISP.



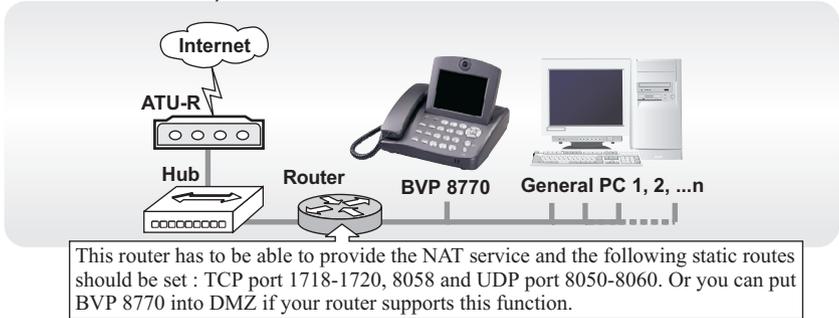
(see p. 40)

\* : as default

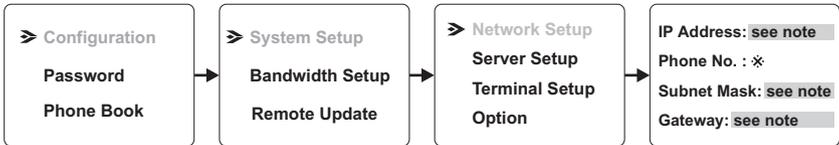
# System Setup (Cont'd)

**Connection** ADSL **Type** Constant ADSL **IP** Multiple, Public, & Fixed

When one of the IPs is shared with other devices (without a DHCP server connected)



## BVP 8770 System Setup



(see p. 37)

\* : as default

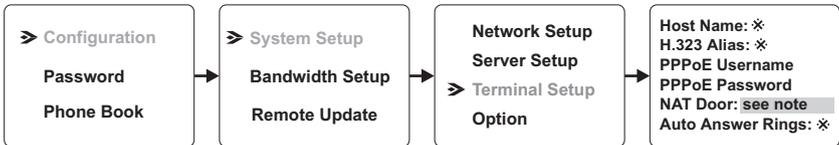
**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment.

If the segment is 172.16.0.0-172.16.0.255, your settings should be:

**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

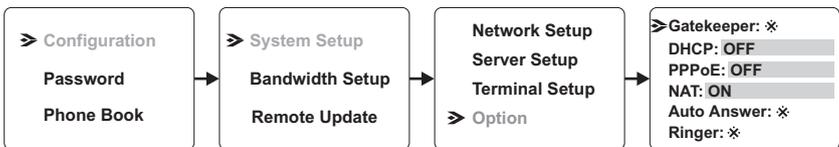
**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



(see p. 39)

\* : as default

**Note :** The NAT door is the public IP of your router and this IP is assigned by your ISP.



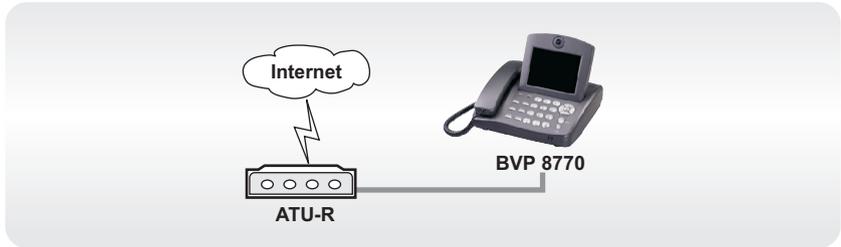
(see p. 40)

\* : as default

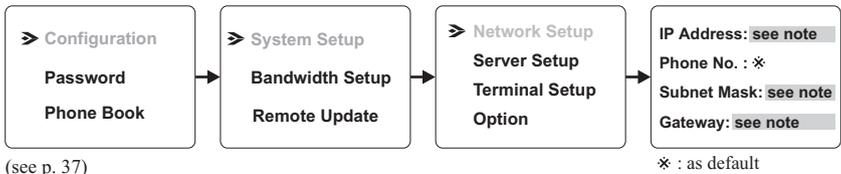
# System Setup (Cont'd)

**Connection** ADSL **Type** Timing ADSL **IP** Single, Public, & Dynamic

When the ADSL is used exclusively by BVP 8770

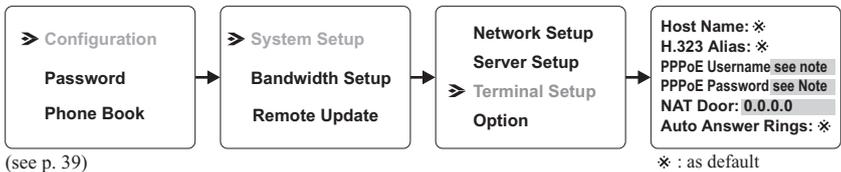


## BVP 8770 System Setup



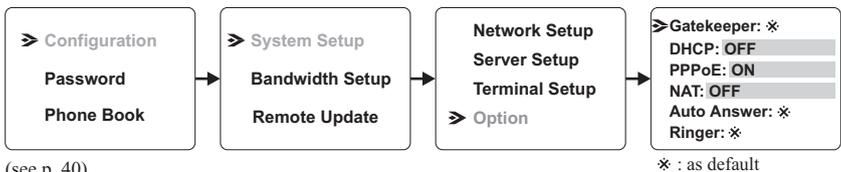
(see p. 37)

**Note :** IP, Subnet Mask and Gateway are assigned by PPPoE.



(see p. 39)

**Note :** Press <OK> to go into a submenu where you enter the PPPoE username or password.

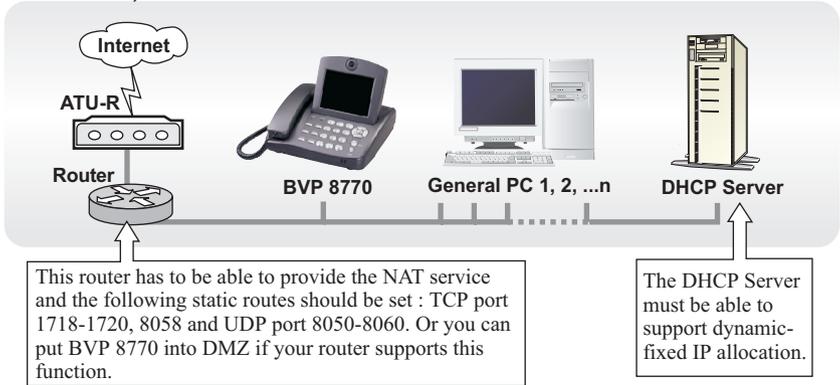


(see p. 40)

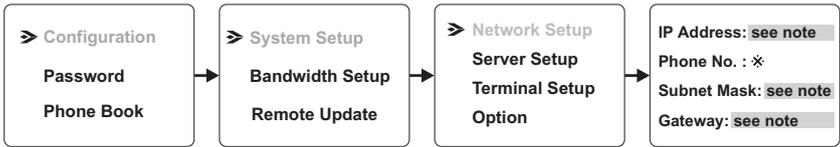
# System Setup (Cont'd)

**Connection** ADSL    **Type** Timing ADSL    **IP** Single, Public, & Dynamic

**When the ADSL is shared with other devices (with a DHCP server connected)**

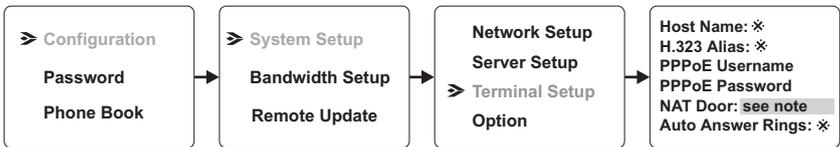


## BVP 8770 System Setup



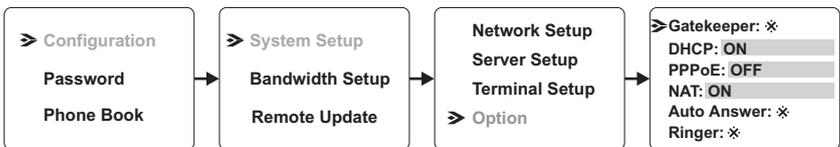
(see p. 37)

**Note :** IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

**Note :** The NAT door is the public IP of your router and is assigned by PPPoE.

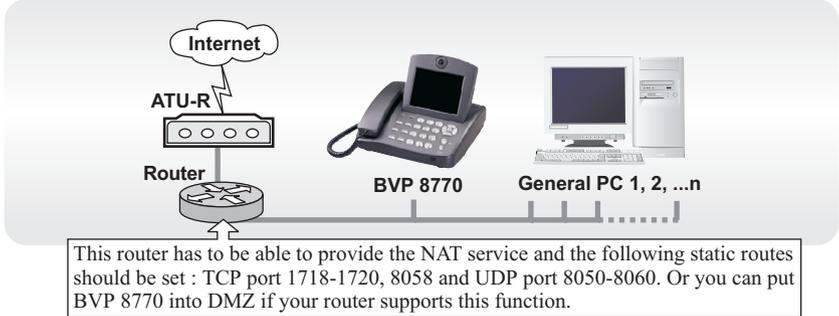


(see p. 40)

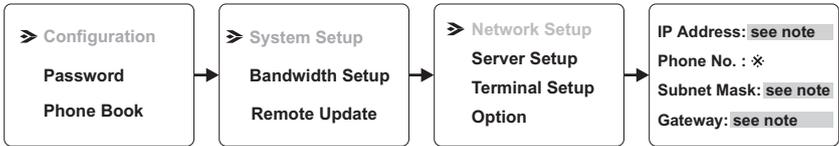
# System Setup (Cont'd)

Connection	ADSL	Type	Timing ADSL	IP	Single, Public, & Dynamic
------------	------	------	-------------	----	---------------------------

When the ADSL is shared with other devices (without a DHCP server connected)



## BVP 8770 System Setup



(see p. 37)

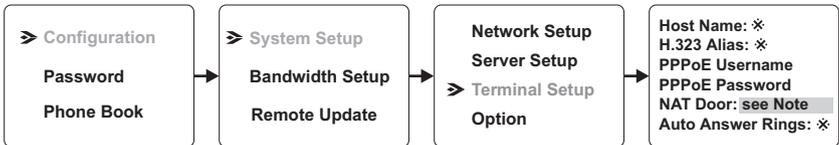
\* : as default

**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment. If the segment is 172.16.0.0-172.16.0.255, your settings should be:

**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

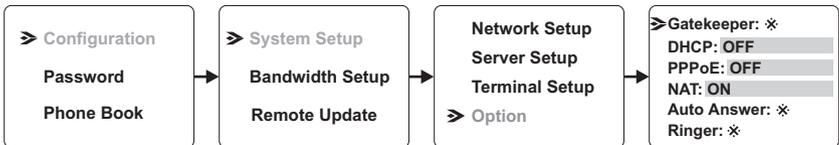
**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



(see p. 39)

\* : as default

**Note :** The NAT door is the public IP of your router and is assigned by PPPoE.



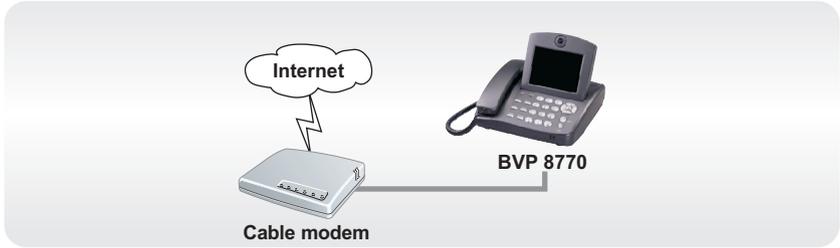
(see p. 40)

\* : as default

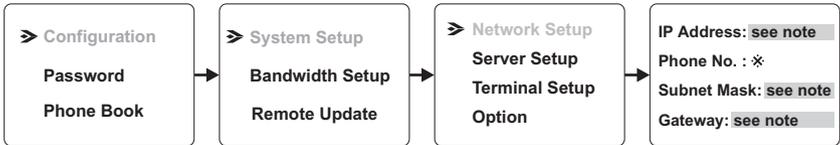
# System Setup (Cont'd)

Connection Cable Type -- IP Single, Public, & Dynamic

When the IP is used exclusively by BVP 8770



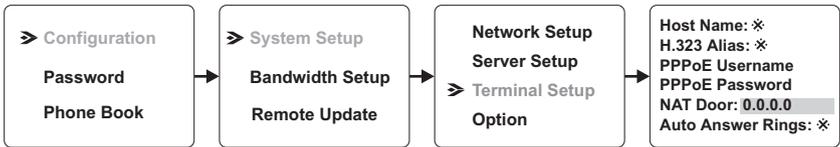
## BVP 8770 System Setup



(see p. 37)

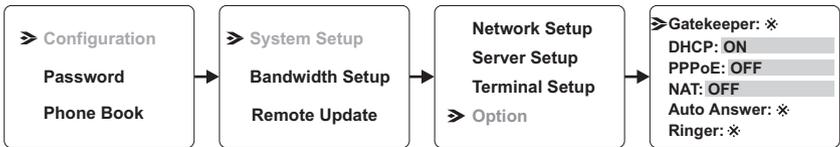
\* : as default

**Note :** IP, Subnet Mask and Gateway are assigned by the DHCP server of your ISP.



(see p. 39)

\* : as default



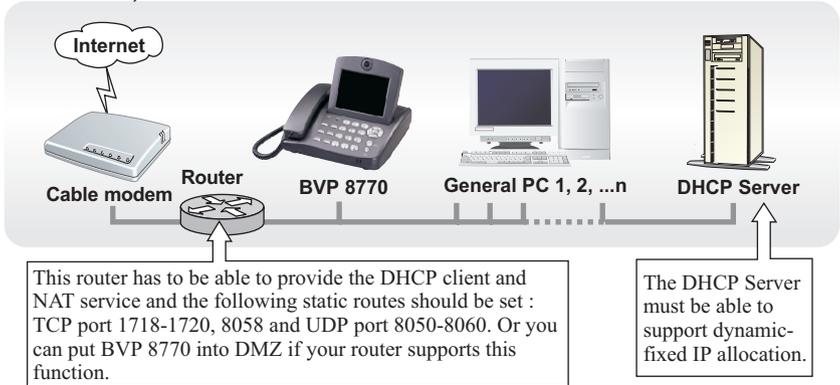
(see p. 40)

\* : as default

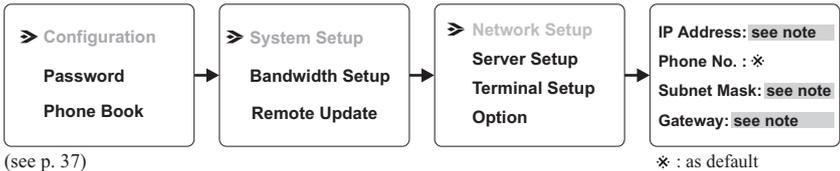
# System Setup (Cont'd)

Connection	Cable	Type	--	IP	Single, Public, & Dynamic
------------	-------	------	----	----	---------------------------

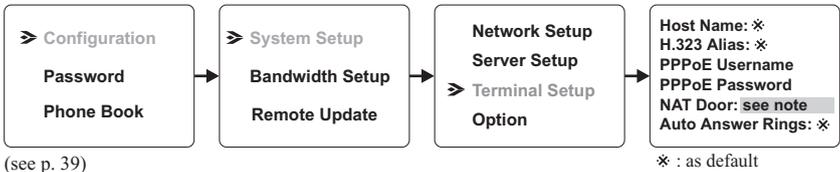
When the IP is shared with other devices (with a DHCP server connected)



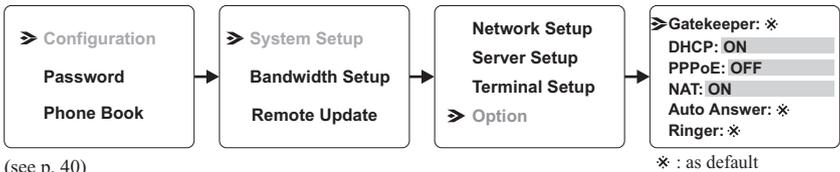
## BVP 8770 System Setup



**Note :** IP, Subnet Mask and Gateway are assigned by your DHCP server.



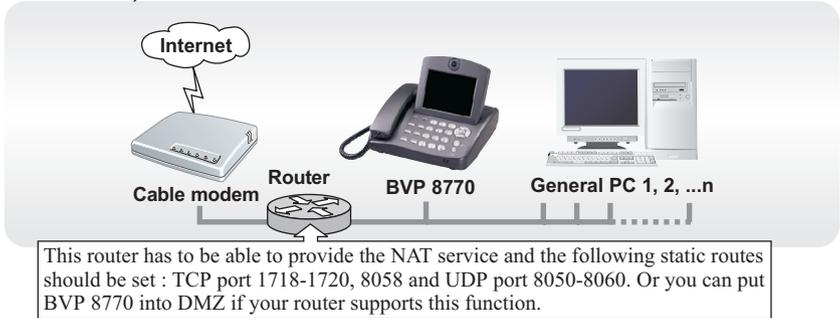
**Note :** The NAT door is the public IP of your router and is assigned by the DHCP server of your ISP.



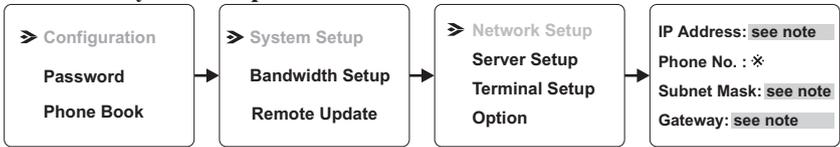
# System Setup (Cont'd)

<b>Connection</b>	Cable	<b>Type</b>	--	<b>IP</b>	Single, Public, & Dynamic
-------------------	-------	-------------	----	-----------	---------------------------

**When the IP is shared with other devices (without a DHCP server connected)**



## BVP 8770 System Setup



(see p. 37)

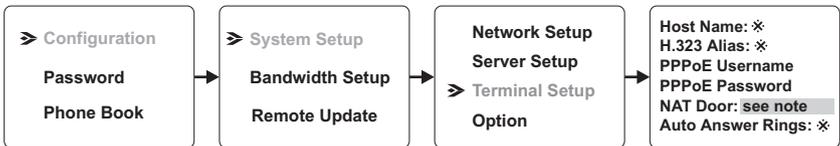
※ : as default

**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment. If the segment is 172.16.0.0-172.16.0.255, your settings should be:

**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

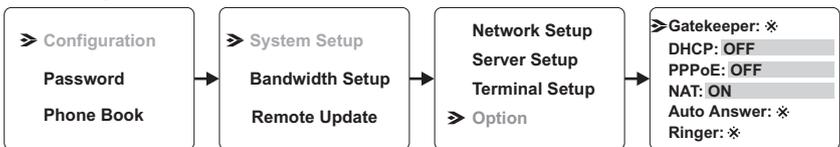
**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



(see p. 39)

※ : as default

**Note :** The NAT door is the public IP of your router and is assigned by the DHCP server of your ISP.



(see p. 40)

※ : as default

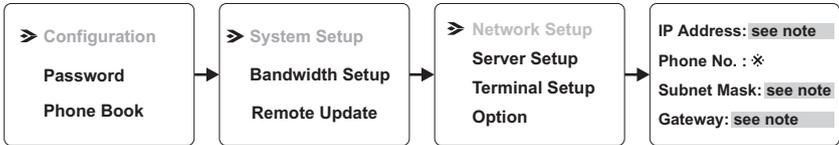
# System Setup (Cont'd)

Connection
LAN
Type
 Firewall
  NAT
  Packet Filter

## With a DHCP server connected



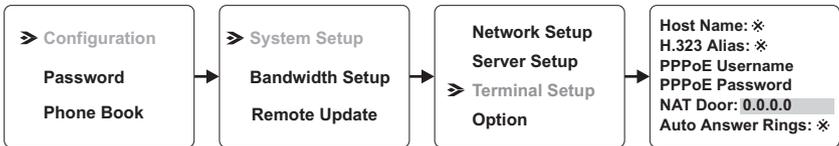
### BVP 8770 System Setup



(see p. 37)

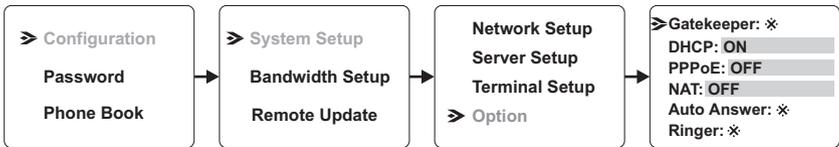
\* : as default

**Note :** IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

\* : as default



(see p. 40)

\* : as default

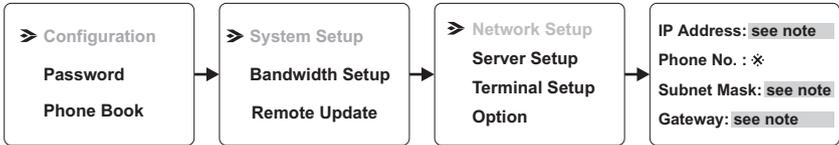
# System Setup (Cont'd)

Connection   
  LAN   
  Type   
  Firewall   
  NAT   
  Packet Filter

## Without a DHCP server connected



### BVP 8770 System Setup



(see p. 37)

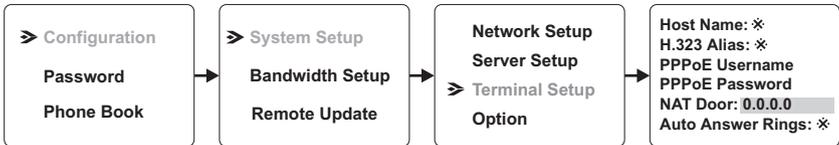
\* : as default

**Note :** IP address, Subnet Mask and Gateway are assigned by your ISP. If you are using an IP segment, which is x.x.x.0-x.x.x.255, your settings should be:

**IP :** one chosen from the range between x.x.x.1 to x.x.x.254

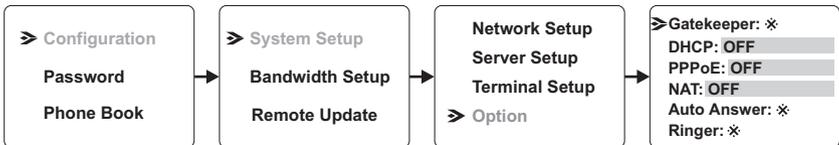
**Subnet mask :** 255.255.255.0

**Gateway :** one chosen from the range between x.x.x.1 to x.x.x.254, usually x.x.x.254, and can't be the same as your IP address.



(see p. 39)

\* : as default



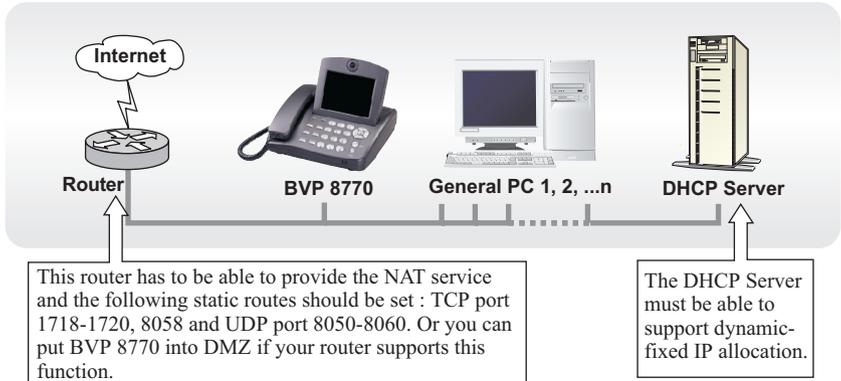
(see p. 40)

\* : as default

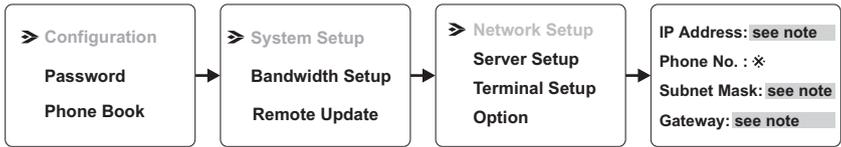
# System Setup (Cont'd)

Connection    LAN     Type     Firewall     NAT     Packet Filter

## With a DHCP server connected



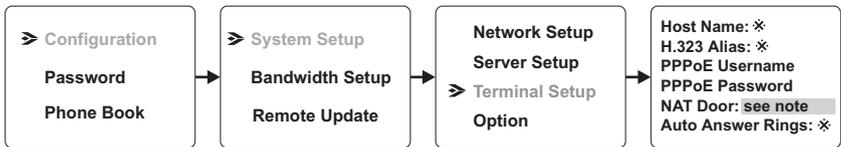
## BVP 8770 System Setup



(see p. 37)

\* : as default

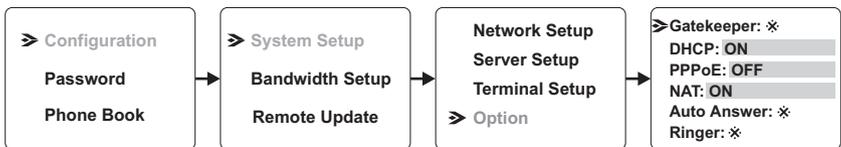
**Note** : IP, Subnet Mask and Gateway are assigned by your DHCP server.



(see p. 39)

\* : as default

**Note** : The NAT door is the public IP of your router and is assigned by your ISP.



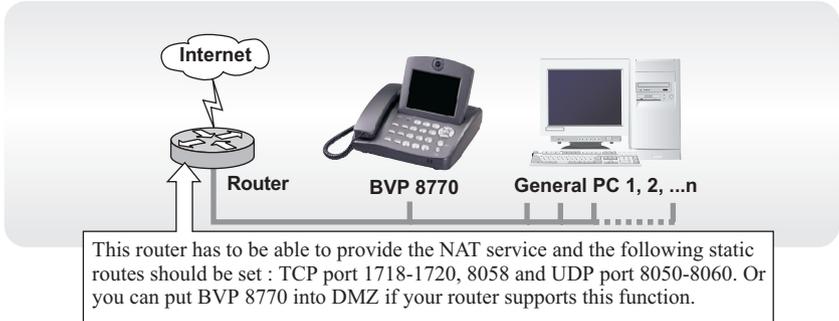
(see p. 40)

\* : as default

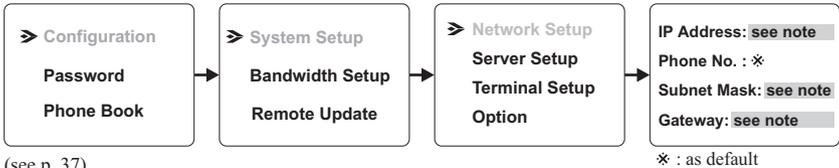
# System Setup (Cont'd)

Connection    LAN    **Type**     Firewall     NAT     Packet Filter

## Without a DHCP server connected



### BVP 8770 System Setup



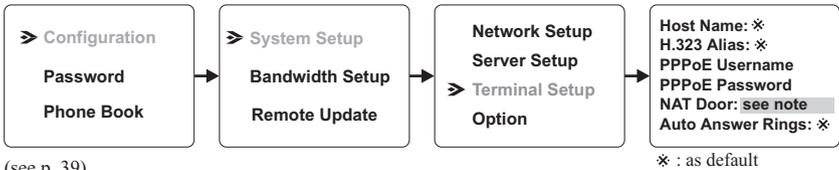
**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment.

If the segment is 172.16.0.0-172.16.0.255, your settings should be:

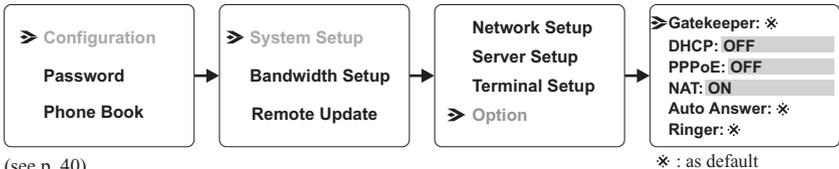
**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



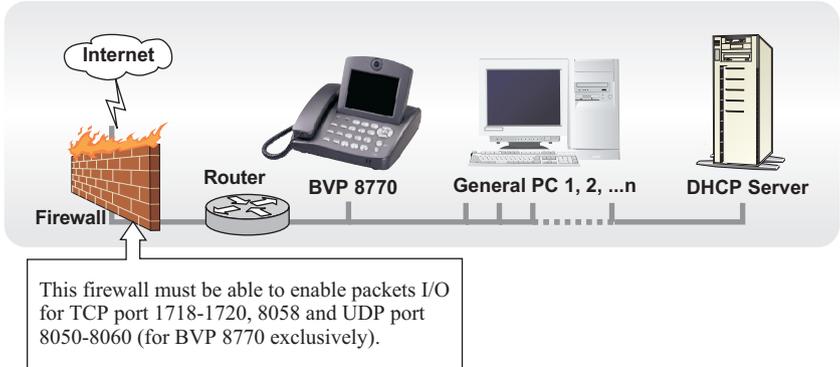
**Note :** The NAT door is the public IP of your router and this IP is assigned by your ISP.



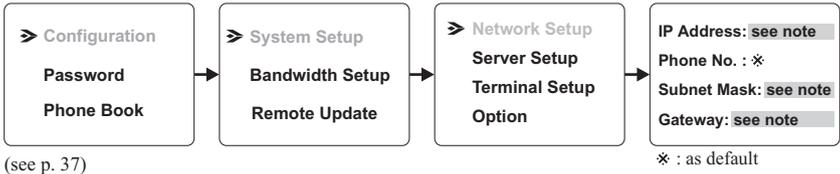
# System Setup (Cont'd)

Connection LAN Type  Firewall  NAT  Packet Filter

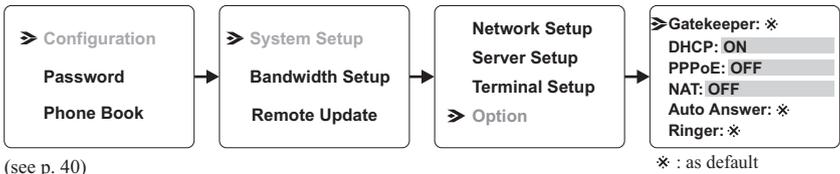
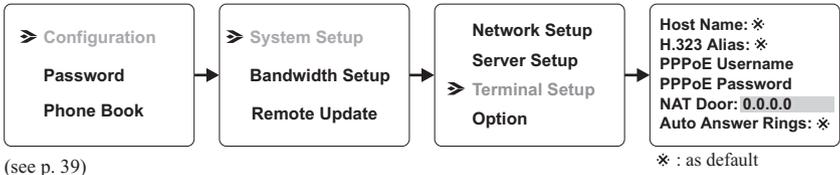
## With a DHCP server connected



## BVP 8770 System Setup



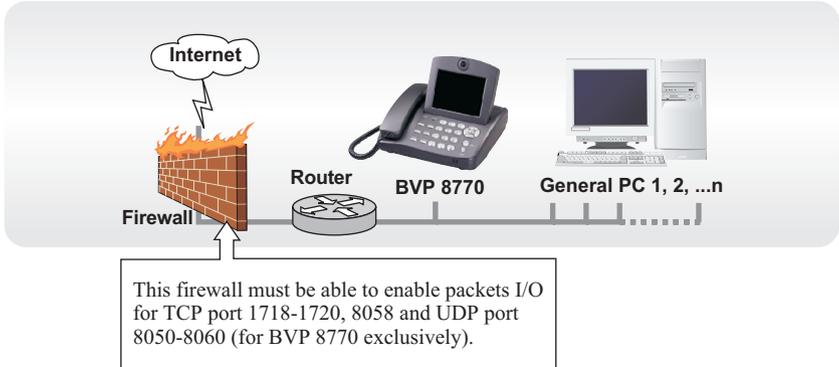
**Note** : IP, Subnet Mask and Gateway are assigned by your DHCP server.



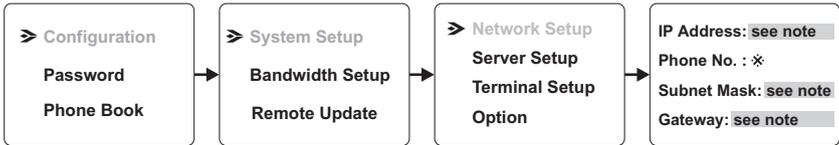
# System Setup (Cont'd)

Connection   
  LAN   
 Type   
 Firewall   
 NAT   
 Packet Filter

## Without a DHCP server connected



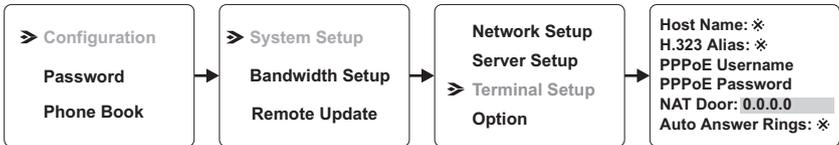
### BVP 8770 System Setup



(see p. 37)

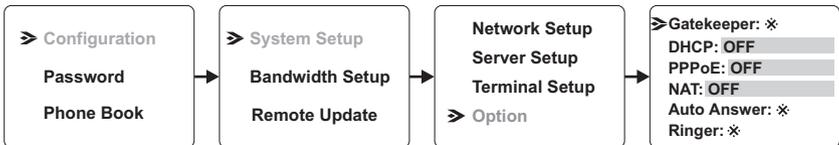
\* : as default

**Note :** IP address, Subnet Mask and Gateway are assigned by your ISP, each consisted of 4 sets of numbers with dots in between them. Check with your ISP for the



(see p. 39)

\* : as default



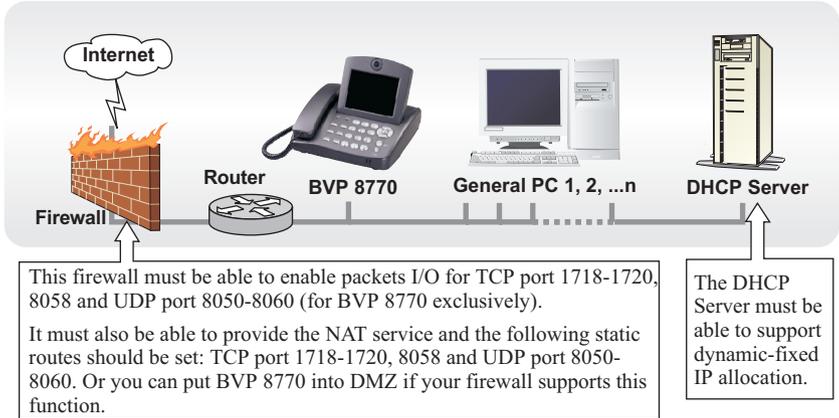
(see p. 40)

\* : as default

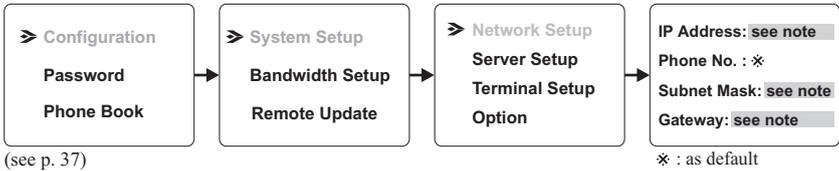
# System Setup (Cont'd)

Connection
LAN
Type
 Firewall
 NAT
 Packet Filter

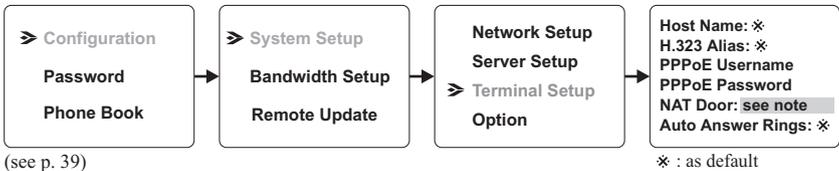
## With a DHCP server connected



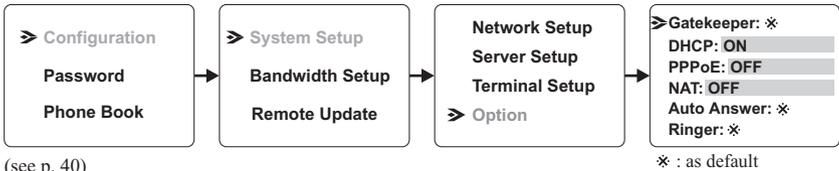
## BVP 8770 System Setup



**Note :** IP, Subnet Mask and Gateway are assigned by your DHCP server.



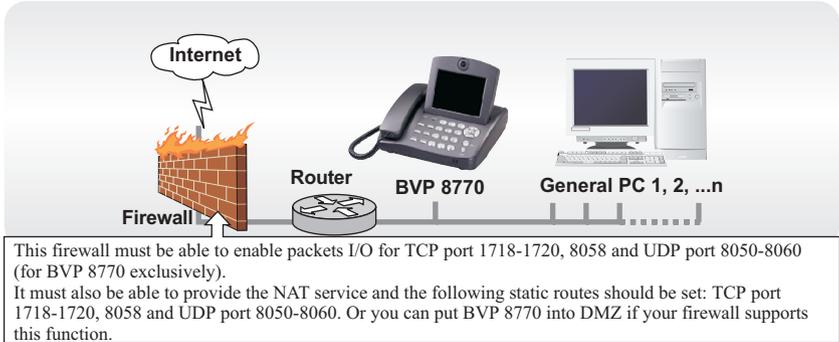
**Note :** The NAT door is the public IP of your firewall and is assigned by your ISP.



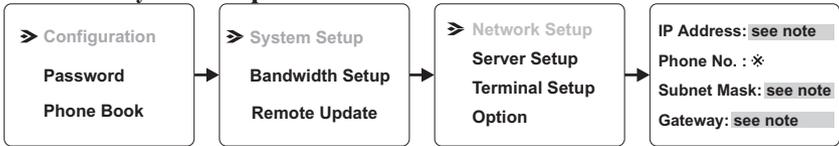
# System Setup (Cont'd)

Connection LAN Type  Firewall  NAT  Packet Filter

## Without a DHCP server connected



### BVP 8770 System Setup



(see p. 37)

\* : as default

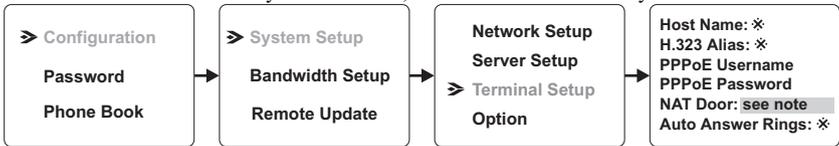
**Note:** You can assign your own IP, Subnet Mask and Gateway within your private segment.

If the segment is 172.16.0.0-172.16.0.255, your settings should be:

**IP :** one chosen from the range between 172.16.0.1 to 172.16.0.254

**Subnet mask :** 255.255.255.0

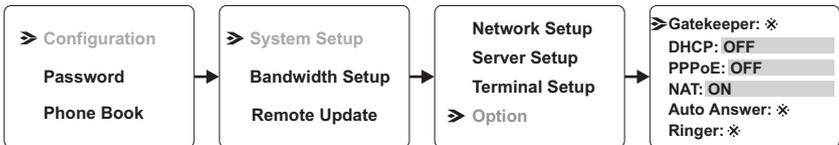
**Gateway :** one chosen from the range between 172.16.0.1 to 172.16.0.254, usually 172.16.0.254, and can't be the same as your IP address.



(see p. 39)

\* : as default

**Note :** The NAT door is the public IP of your firewall and this IP is assigned by your ISP.



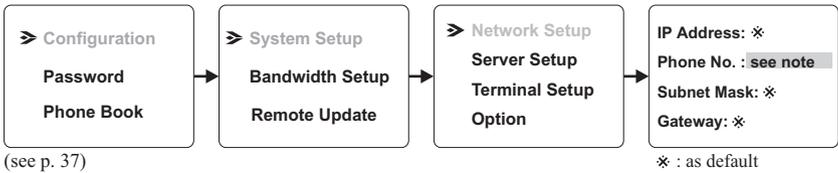
(see p. 40)

\* : as default

# 5 Working with a Gatekeeper

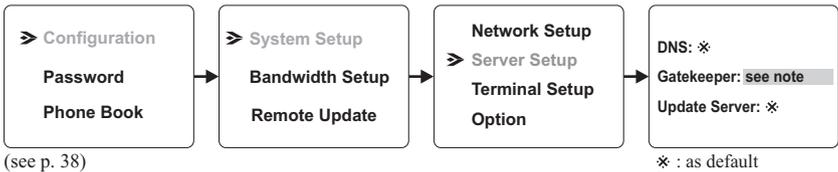
If the Internet service you use applies the gatekeeper, it is important to be sure that certain settings are done as instructed below.

## Network Setup



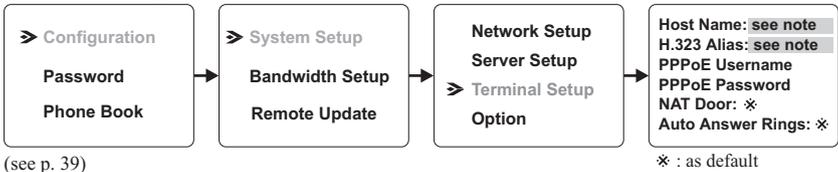
**Note :** You need to get a phone number from your gatekeeper service provider.

## Server Setup



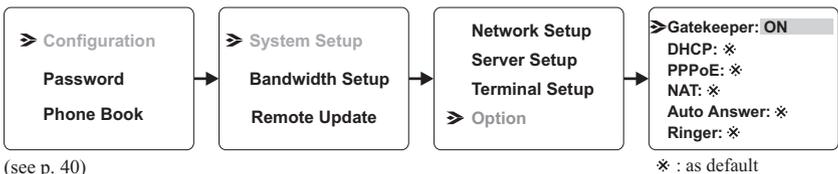
**Note :** You need to get the IP of the gatekeeper from your gatekeeper service

## Terminal Setup



**Note :** The host name and H.323 alias may be assigned by your gatekeeper service provider.

## Option



After finishing these settings, you don't need the IP address of the other party when making a call. Simply dial their phone number, then your call will get through. However, the other party has to be registered with the gatekeeper as well.

# 6 Making a Call

## Before making a video call

Here are a few things you need to consider before making a video call.

- 1** Keep a distance of 0.5 meters away from BVP 8770.



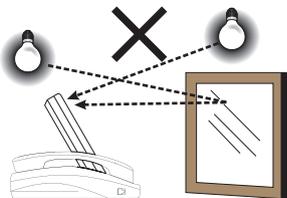
- 3** Avoid having lights behind you that might shine into the camera lens.



- 2** Make sure of the most appropriate lighting source, preferably from the front with the beam on your face.

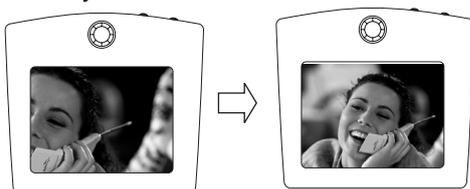


- 4** Do not point the BVP 8770 at a mirror or bright light.

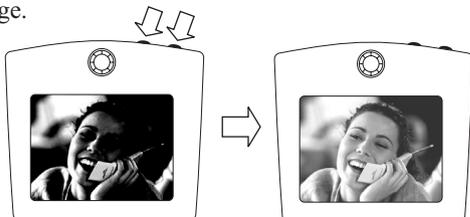


- 5** Avoid having a lot of movement in the background and try not to move around excessively. Too much movement tends to slow down the frame rate of the video image, resulting in a jerky picture.

- 6** Use the self-view image and focus knob to get the best shot of yourself.



- 7** Adjust the hue and brightness of the screen for best image.



## Making a video call

- Step 1 Turn on the power of the unit. The LCD screen shows the local view, the image of the caller.
- Step 2 Pick up the handset. Enter the desired IP address/number \* (See note). Use the " \* " key to input the dots between the numbers. When a key is pressed, the image on the LCD screen disappears and the numbers you input are displayed.
- Step 3 The other party answers the phone, and the video connection is established. You will be able to see the person you are talking to.
- Step 4 To end the connection, simply hang up the handset.
- Step 5 If there is difficulty in making connection, please make sure that BVP 8770 has been properly installed. Please also check if the network settings are correctly configured.

### Power Saving Mode

The BVP 8770 incorporates a power saving circuit to protect its internal components and extend its service life.

If the BVP 8770 is inactive for 5 minutes, the LCD screen automatically shuts down and goes blank. The power indicator blinks.

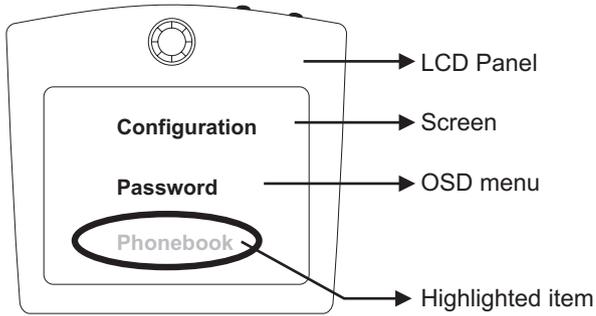
The image returns to the screen when the handset is picked up or any key is pressed.

***\*Note: To dial numbers, BVP 8770 must work in conjunction with additional accessories, such as the H.323 Gatekeeper.***

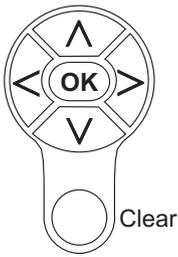
# 7 Making Adjustments

## Using OSD menus

BVP 8770 allows you to use the cursor panel on the keypad to control OSD (on-screen-display) menus. The OSD menu is brought out by pressing the **OK** button on the cursor panel of the keypad. The figure below shows you what an OSD menu looks like:



## Operating OSD menus — cursor panel explained



**Cursor Panel**



Brings up on-screen menu, enter the sub-menu, or confirm the selection made.



Moves the cursor right or enter the sub-menu.



Moves the cursor left or go back to the previous menu.



Moves the highlighted option down.



Moves the highlighted option up.

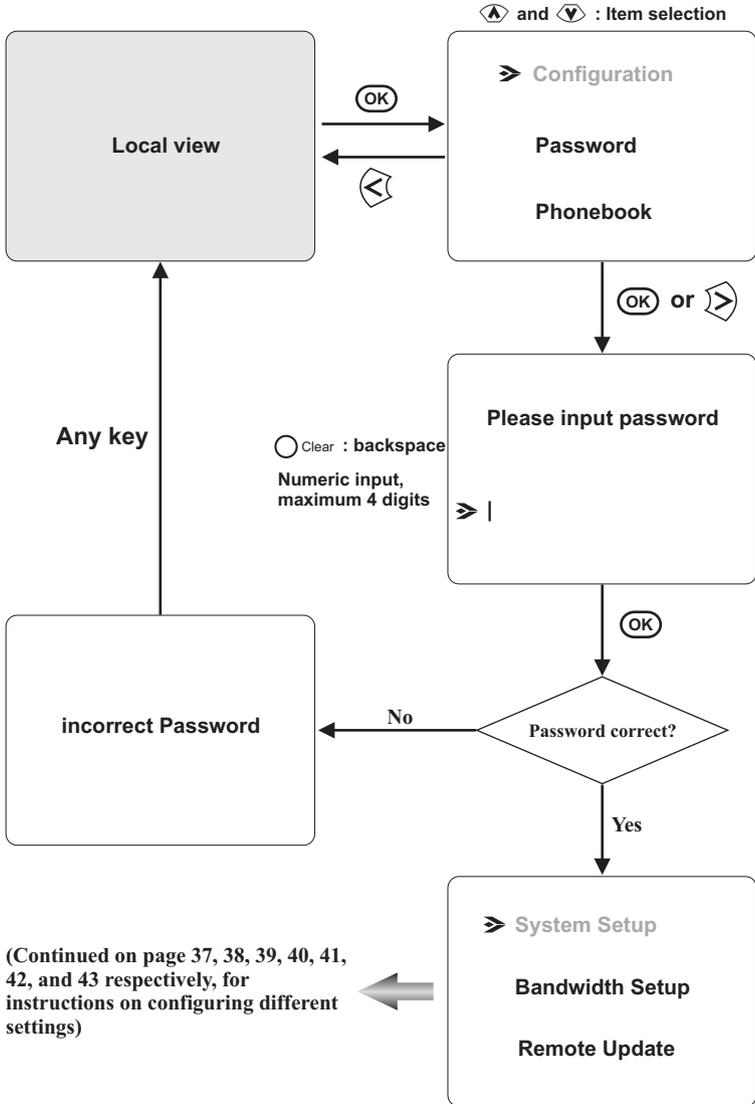


Clear

Goes back to the previous menu, or serves as the backspace key when inputting data.

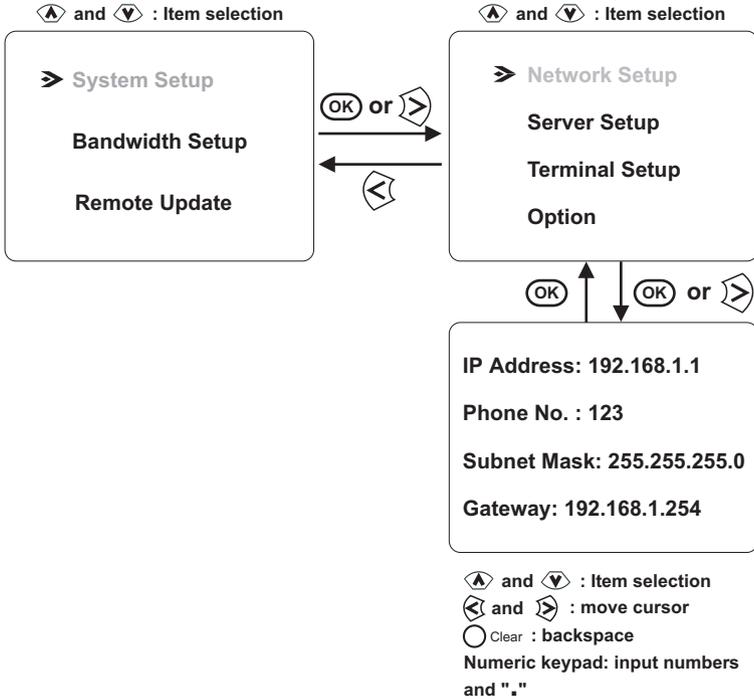
# Using OSD menus Configuration

## Password Checking



# Using OSD menus Configuration ► System Setup

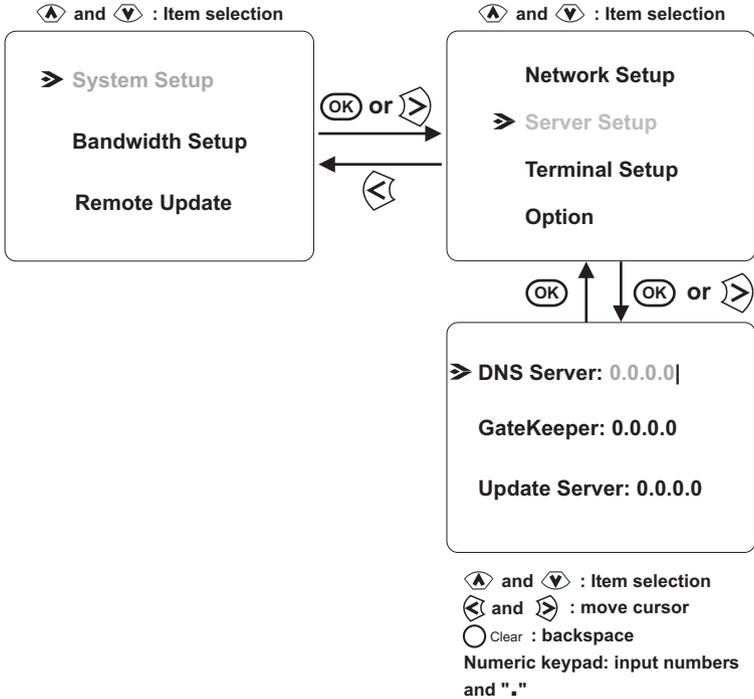
## Network Setup



After changing any setting under **System Setup**, you need to restart BVP 8770 (turn the power off and then turn it on) so the changes will take effect (see page 44).

# Using OSD menus Configuration ► System Setup

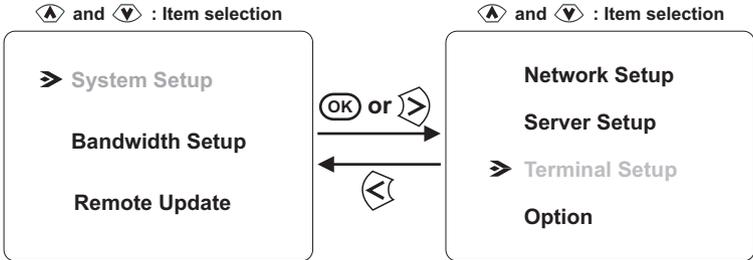
## Server Setup



After changing any setting under *System Setup*, you need to restart BVP 8770 (turn the power off and then turn it on) so the changes will take effect (see page 44).

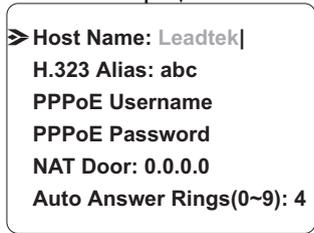
# Using OSD menus Configuration ► System Setup

## Terminal Setup

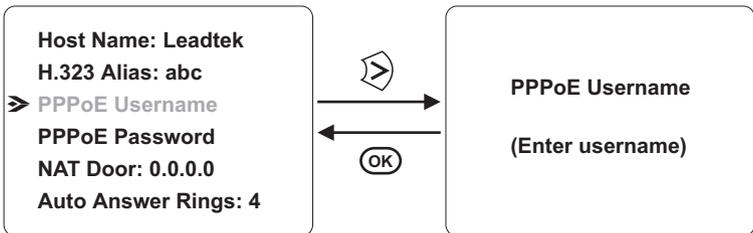


After changing any setting under *System Setup*, you need to restart BVP 8770 (turn the power off and then turn it on) so the changes will take effect (see page 44).

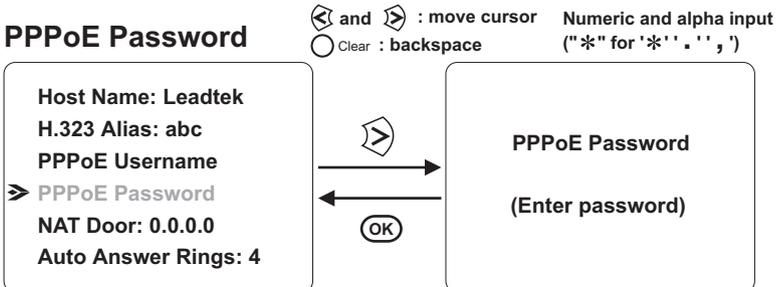
- ▲ and ▼ : Item selection
- ⬅ and ➤ : move cursor
- Clear : backspace
- Numeric keypad: input numbers and "."



### PPPoE Username

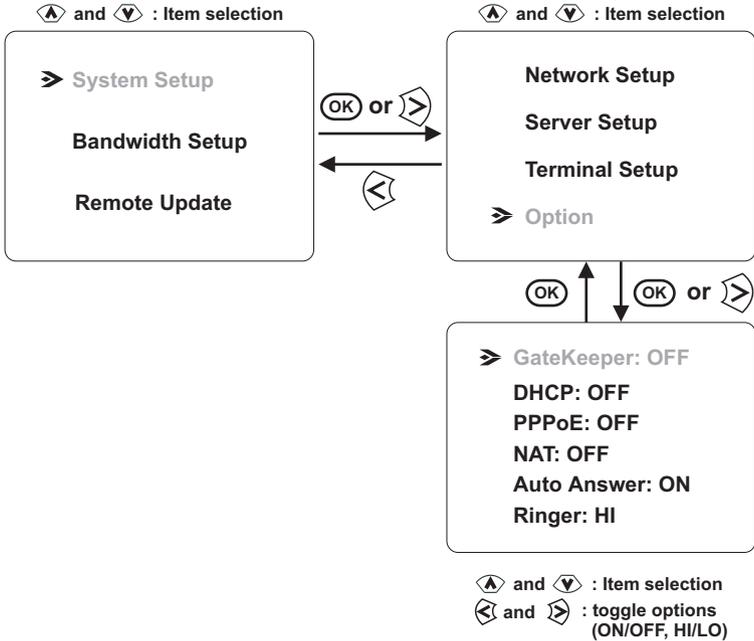


### PPPoE Password



# Using OSD menus Configuration ► System Setup

## Option

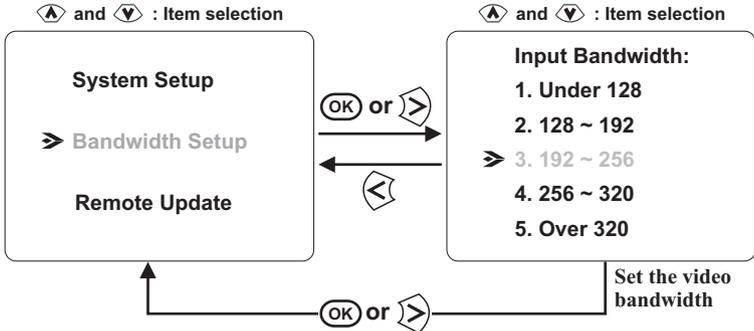


Note: You can change *Phone Number* only when *DHCP* is *ON*.

*Phone Number* is required when *GateKeeper* is set to *ON*, and its address must be unique. If you are not familiar with them, please contact your service provider.

After changing any setting under *System Setup*, you need to restart BVP 8770 (turn the power off and then turn it on) so the changes will take effect (see page 44).

## Using OSD menus Configuration ► Bandwidth Setup



The Bandwidth Setup in BVP 8770 divides the bandwidth into 5 levels: (in Kbps)

1. Under 128
2. 128 ~ 192
3. 192 ~ 256
4. 256 ~ 320
5. Over 320

Note that the bandwidth affects the quality of video transmission; a low bandwidth setting that leaves too much bandwidth unused is a waste of connection resources, and a high bandwidth setting that exceeds the bandwidth that is available will jam the transmission and the video quality will be far lower than expected.

To choose the bandwidth that makes the most effect use of your connection, read the following carefully.

### For home users:

Set the bandwidth you wish to be used by the BVP 8770. It should not be more than the bandwidth of your type of connection.

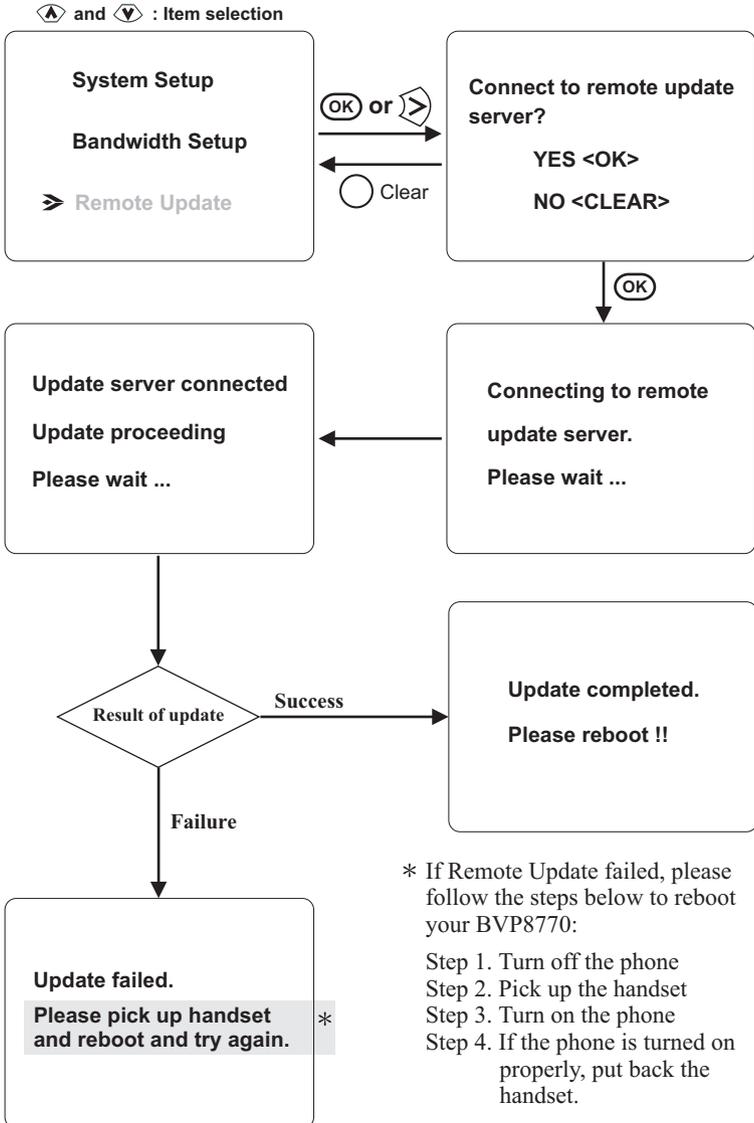
### Note for ADSL users:

The upload and download rates of BVP 8770 are the same. ADSL is a type of connection whose download rate is not the same with the upload rate. ADSL users are advised to set the lower rate of the two as the bandwidth to be used by BVP 8770.

### For business users:

It is best to reserve a certain amount of bandwidth for videoconferencing on a LAN connection for the BVP 8770 users to set its bandwidth accordingly.

# Using OSD menus Configuration ▶ Remote Update



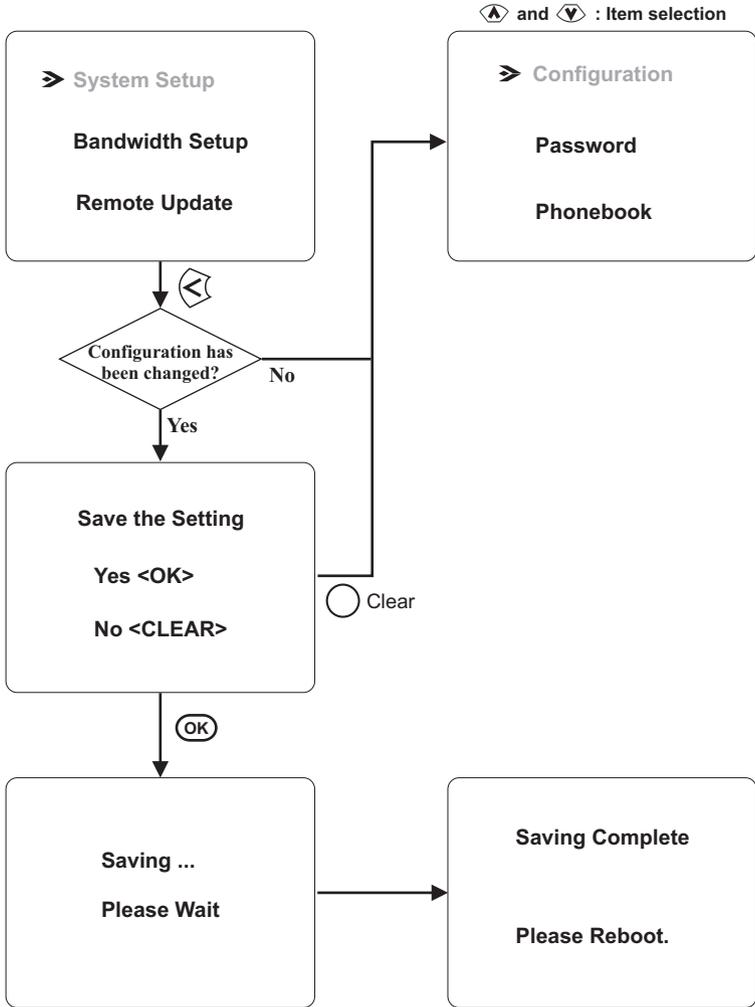
## Using OSD menus Configuration ► Remote Update

Should the update failure be caused by the update server, and the attempt of re-entering the update procedure be unsuccessful, the system will still function provided the step 1 through step 4 of the instructions given above are followed in restarting the system.

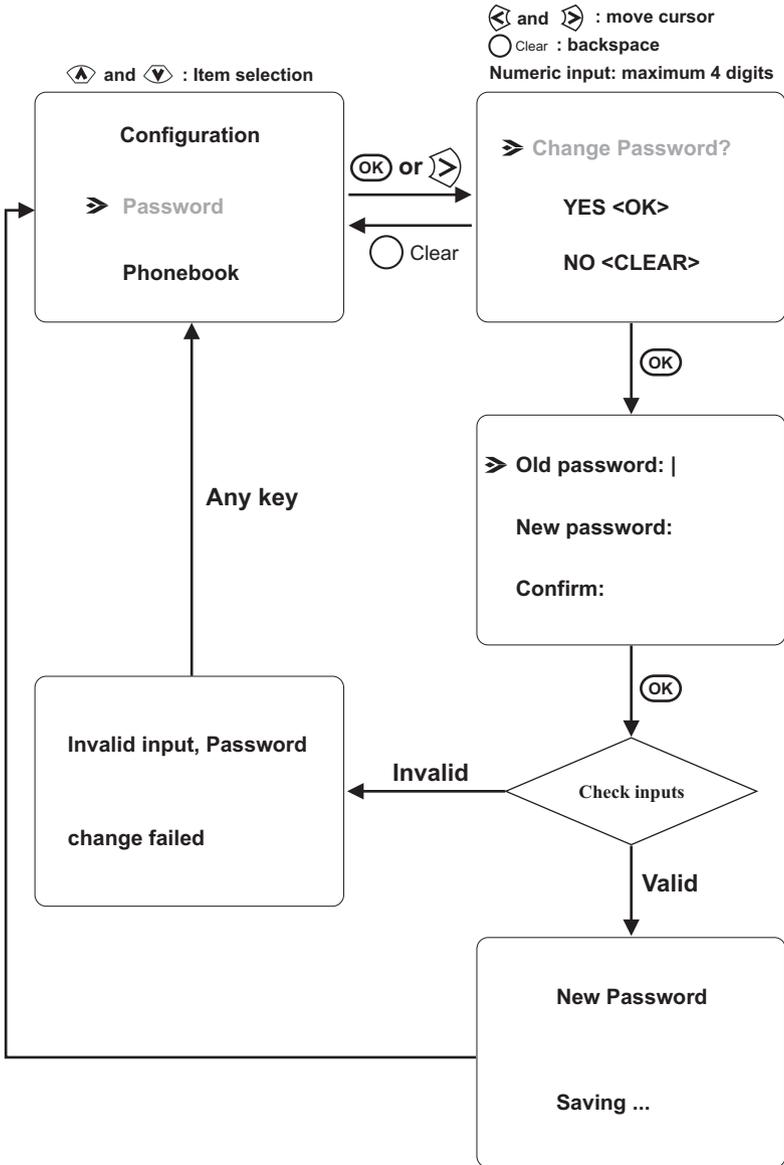
The updated software will be created to suit the ongoing development of the internet environment. Users who continue to use BVP 8770 under the same connection, do not need to renew the software. If you do not know whether you should update the software under certain circumstances, visit our website at <http://www.leadtek.com.tw> for information you need.

# Using OSD menus Configuration

## Configuration Changed

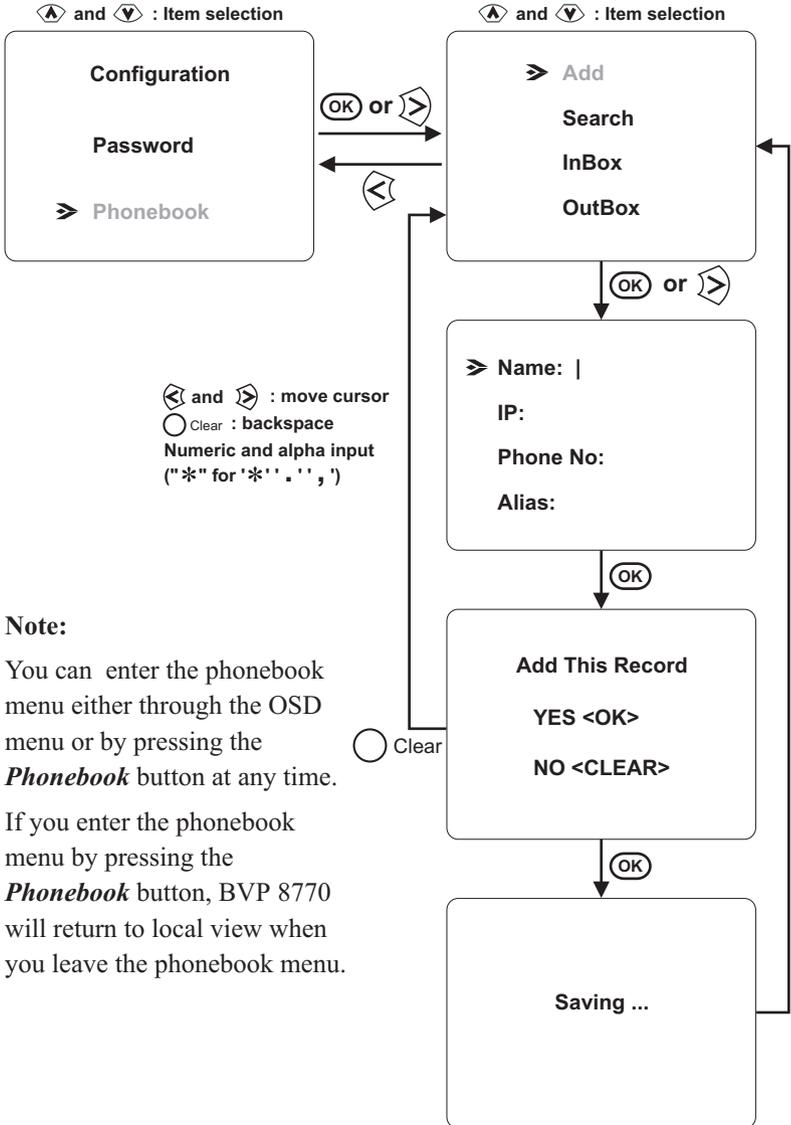


# Using OSD menus Password ► Change Password



# Using OSD menus Phonebook ► Add

## Adding to the phonebook



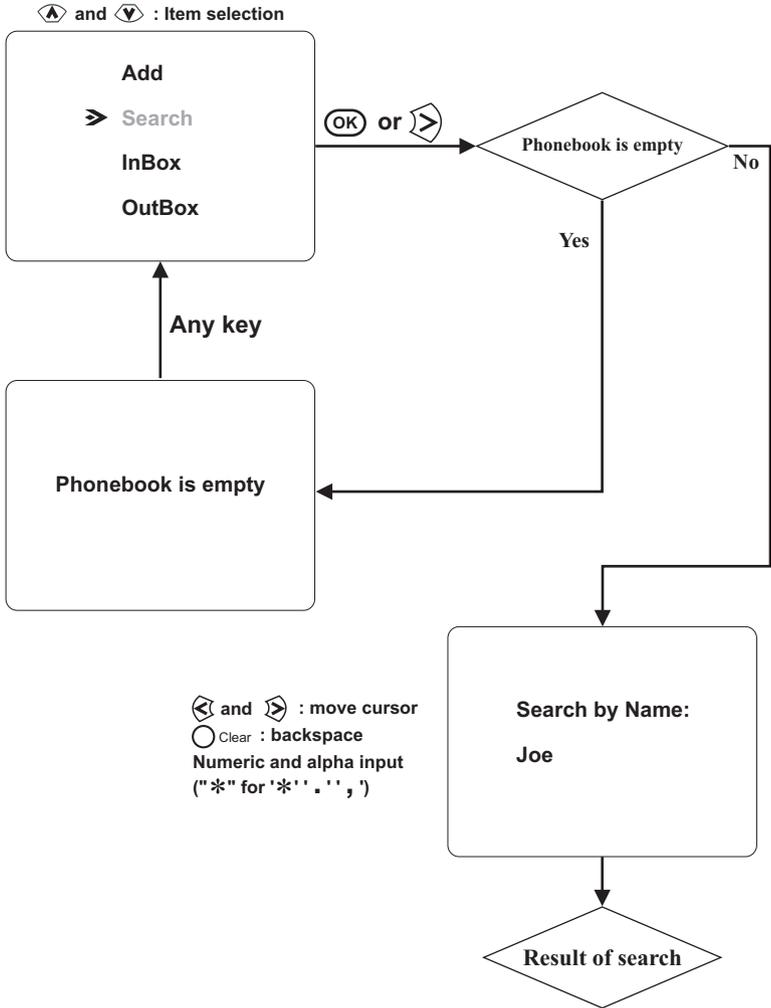
**Note:**

You can enter the phonebook menu either through the OSD menu or by pressing the *Phonebook* button at any time.

If you enter the phonebook menu by pressing the *Phonebook* button, BVP 8770 will return to local view when you leave the phonebook menu.

# Using OSD menus Phonebook ► Search

## Search for a number

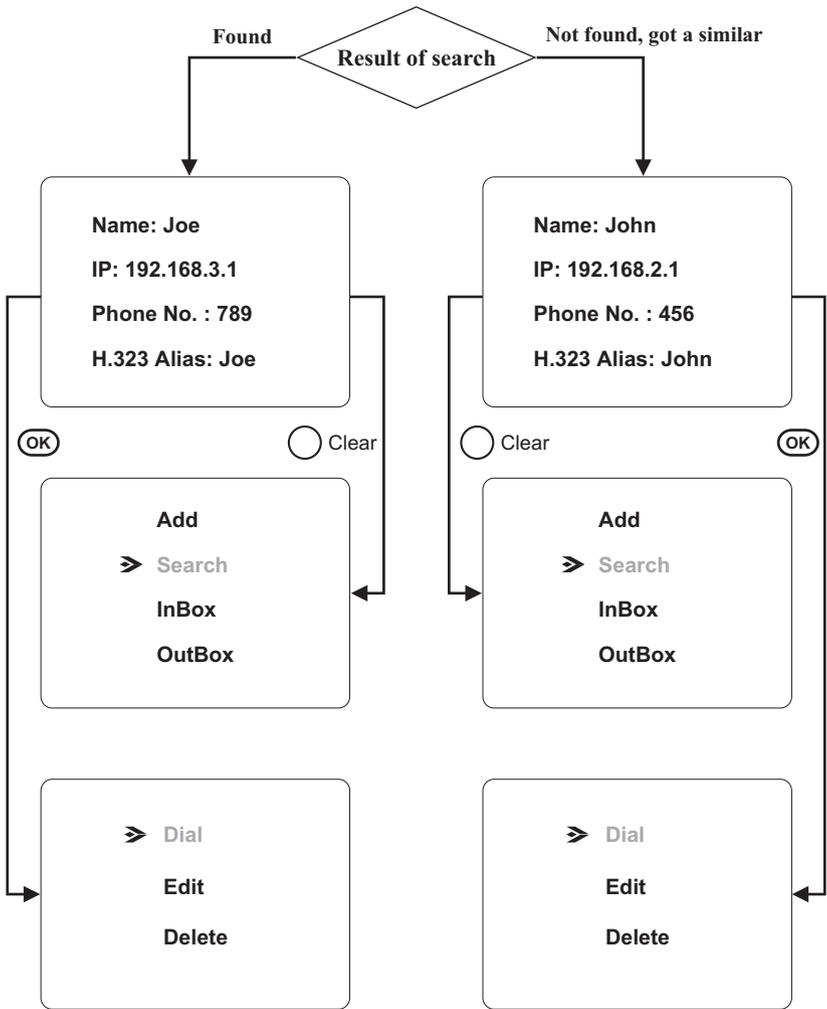


(Continued on next page)

# Using OSD menus Phonebook ► Search

## Search for a number (cont'd)

(Continued from previous page)



(Continued on next page)

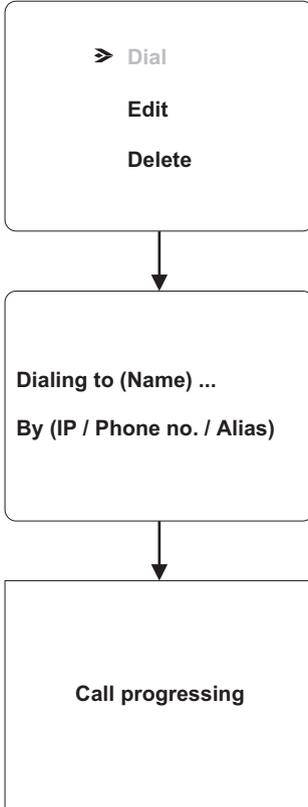
(Continued on next page)

## Using OSD menus Phonebook ► Search

### Search for a number (cont'd)

#### Dial the searched number

▲ and ▼ : Item selection



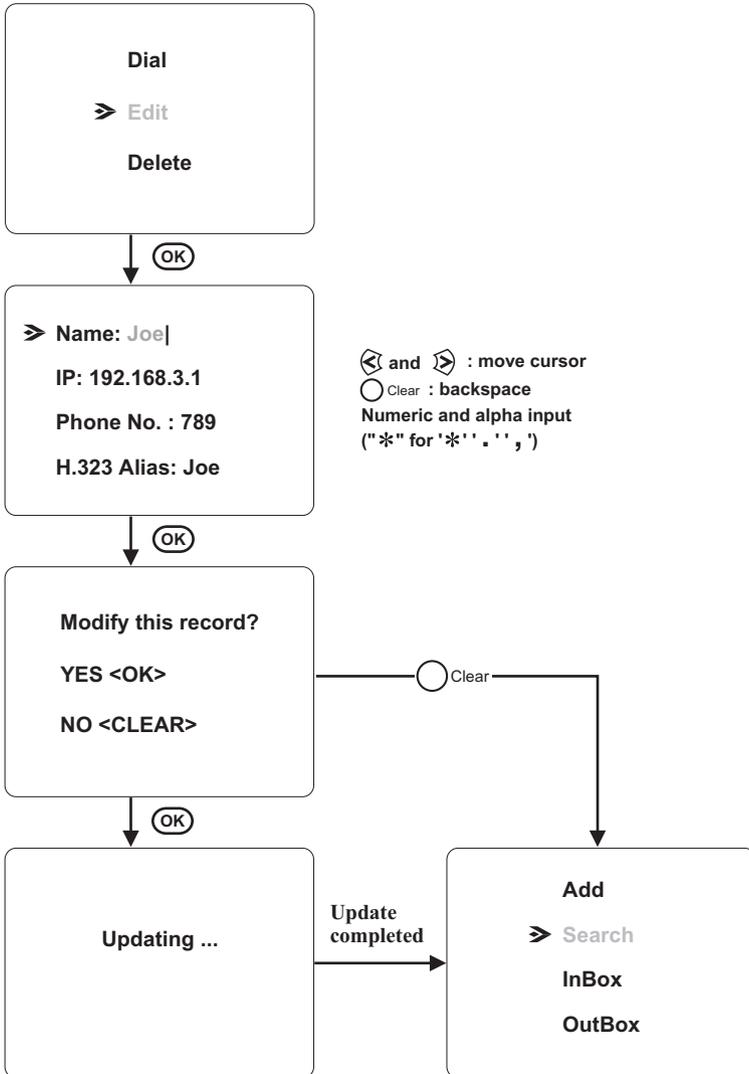
If you can not dial out with BVP 8770, please hang up or press the speakerphone button to return to local view, and try to dial again.

# Using OSD menus Phonebook ► Search

## Search for a number (cont'd)

### Edit the phonebook record of the searched number

▲ and ▼ : Item selection

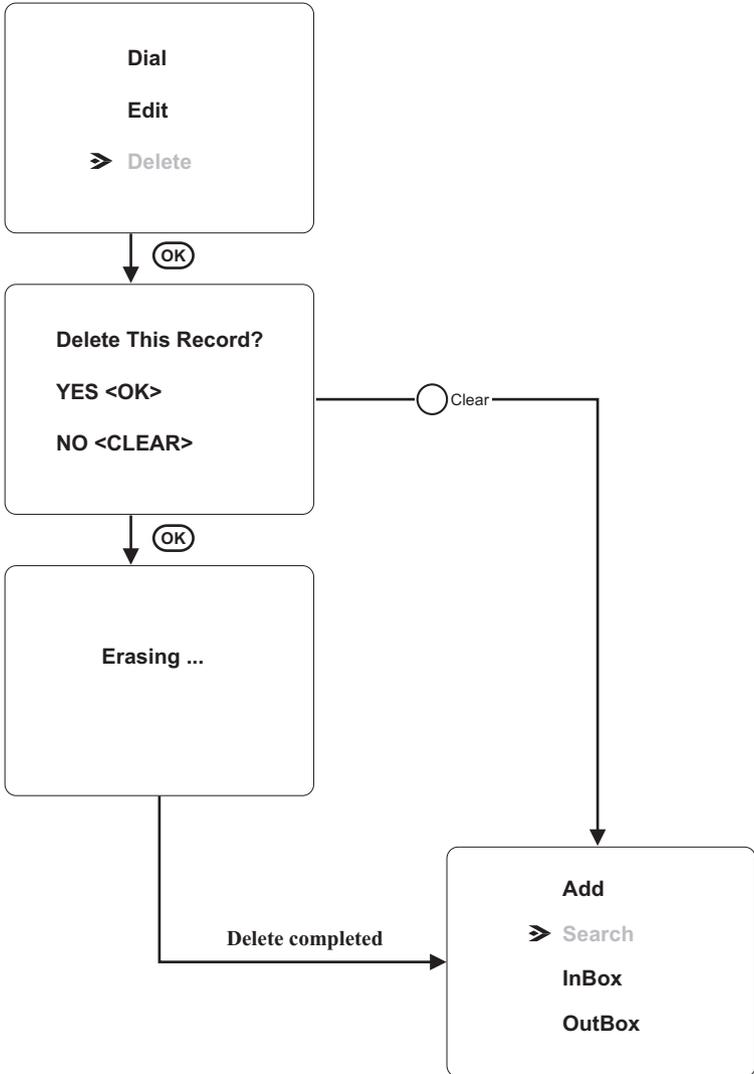


# Using OSD menus Phonebook ► Search

## Search for a number (cont'd)

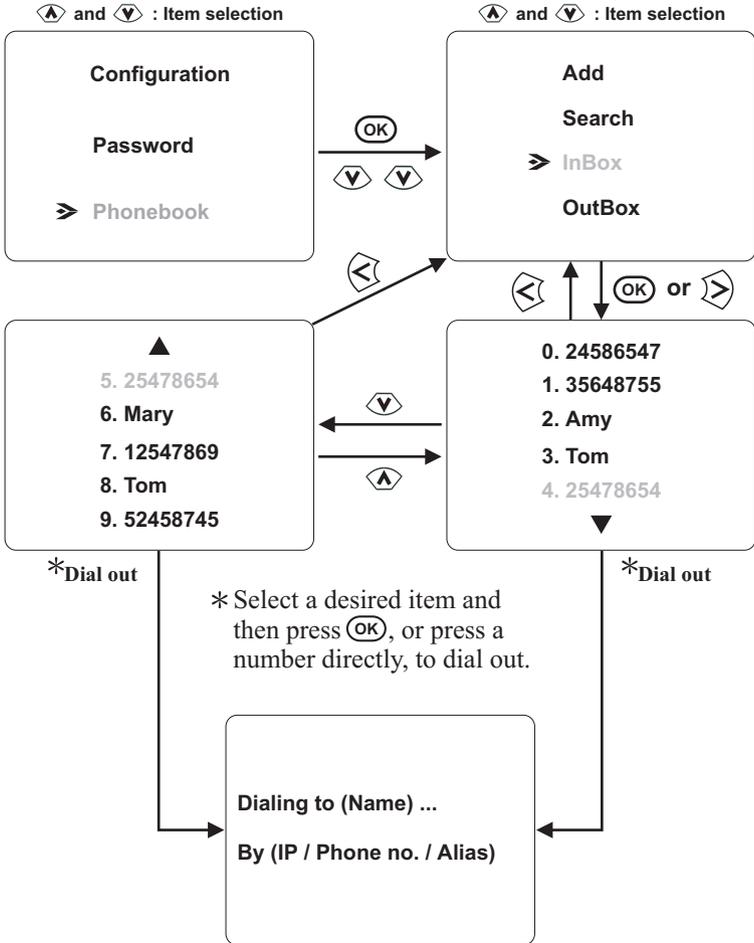
Delete the phonebook record of the searched number

▲ and ▼ : Item selection



# Using OSD menus Phonebook ▶ InBox

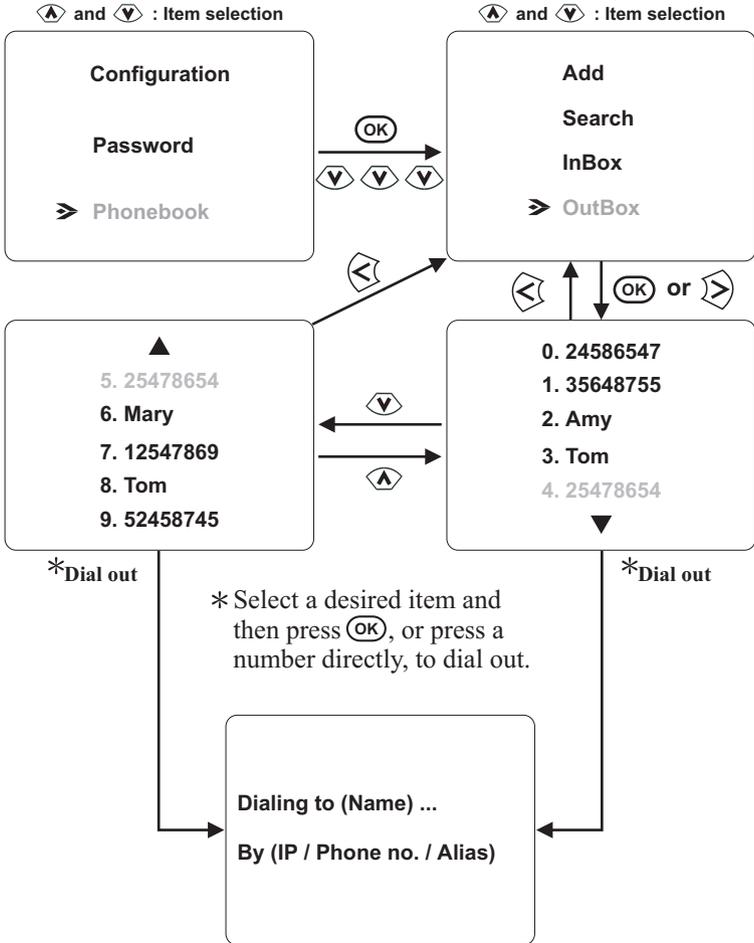
InBox contains the numbers of the 10 last received calls.



If you can not dial out with BVP 8770, please hang up or press the speakerphone button to return to local view, and try to dial again.

# Using OSD menus Phonebook ▶ OutBox

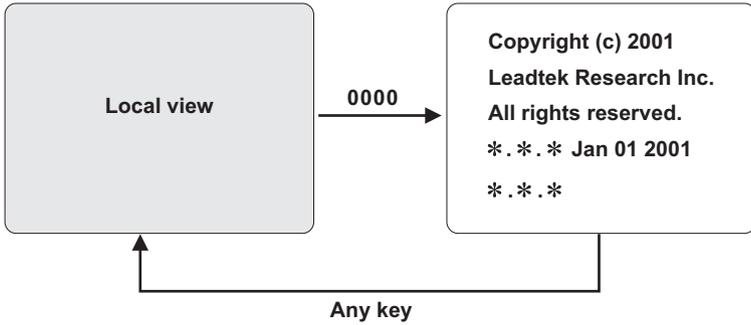
OutBox contains the numbers of the 10 last dialed calls.



If you can not dial out with BVP 8770, please hang up or press the speakerphone button to return to local view, and try to dial again.

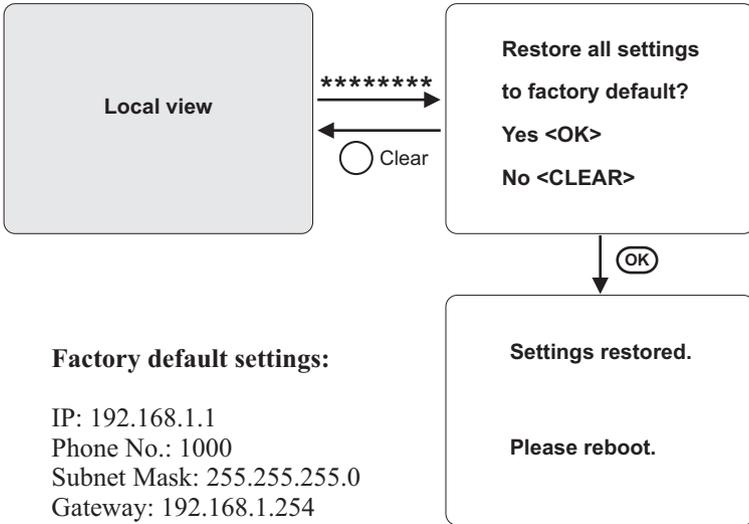
## Using OSD menus Copyright Information

In local view screen, pressing "0000" will bring out a status screen with some information displayed, including the company name, copyright statement, and hardware/software version.



## Using OSD menus    Restore factory settings

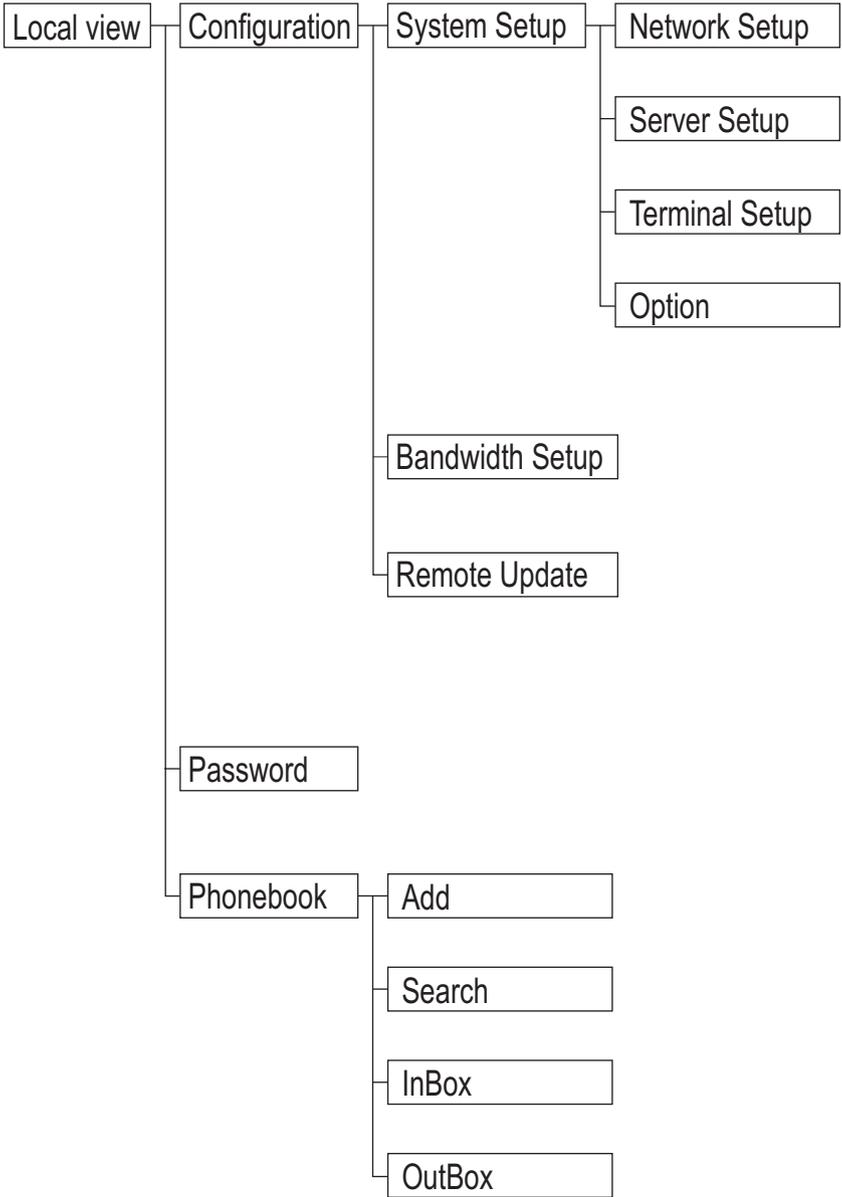
In local view screen, pressing "\*\*\*\*\*" (eight asterisks) will bring out a dialog window, asking if you want to restore all settings to factory default (see below). Press **OK** to begin the process. Press **Clear** to cancel.



### Factory default settings:

IP: 192.168.1.1  
Phone No.: 1000  
Subnet Mask: 255.255.255.0  
Gateway: 192.168.1.254  
DNS Server: 0.0.0.0  
GateKeeper: 0.0.0.0  
Update Server: 0.0.0.0  
Host Name: BVP8770  
H.323 Alias: Leadtek  
PPPoE username: <empty>  
PPPoE password: <empty>  
NAT door: 0.0.0.0  
Auto Answer Rings: 4  
Gatekeeper: OFF  
DHCP: OFF  
PPPoE: OFF  
NAT: OFF  
Auto Answer: OFF  
Ringer: HI  
Bandwidth: 192 ~ 256  
Phonebook, InBox, OutBox: <empty>

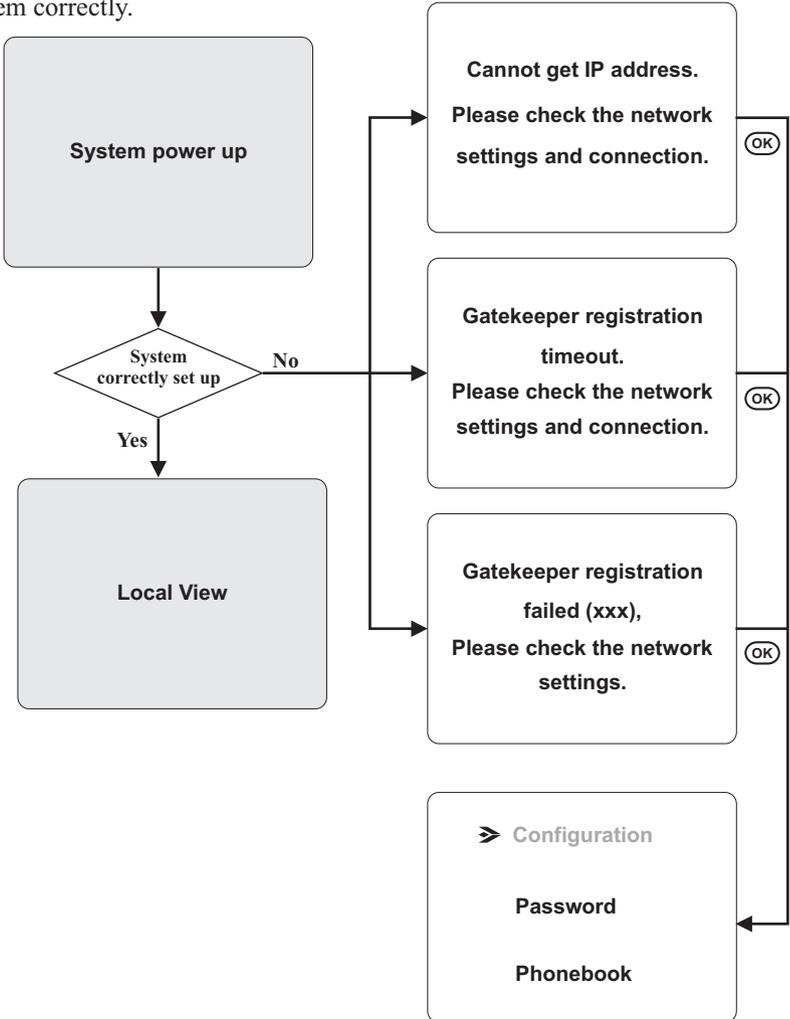
# 8 OSD Menu Tree



# 9 Trouble Shooting

## Error messages in bootup sequence

In factory default setting, the local view will be displayed when BVP8770 is powered on. If the system is not correctly set up, any of the three messages will appear on screen, as shown below. Please press **OK** and refer to **Chapter 4: System Setup** and **Chapter 5: Working with a Gatekeeper** to set up the system correctly.



# Error messages in changing System Setup settings

When the user changes the settings in System Setup menu, BVP8770 will automatically check if the configuration is set up correctly before leaving OSD menu. If any item is not properly configured, an error message as well as the remedy will be displayed. Please follow the instructions on the screen and refer to *Chapter 4: System Setup* and *Chapter 5: Working with a Gatekeeper* for correct settings.

**DHCP is OFF.**  
**Please assign the IP address.**

DHCP is set to OFF but the IP address is not assigned.

When BVP 8770 does not use DHCP to get an IP, you have to assign an IP for it. Please assign the IP address.

**PPPoE is ON.**  
**Please assign the username.**

PPPoE is set to ON but the username is not given. The username is required when you use PPPoE.

Please assign the PPPoE username that you use to login.

**Host Name is empty.**  
**Please assign it.**

The Host Name is empty. BVP 8770 can not work without a Host Name. Please input a Host Name for BVP 8770.

## Error messages in changing System Setup settings (cont.'d)

**Gatekeeper is ON.  
Please assign  
the Gatekeeper IP.**

Gatekeeper is set to ON but the Gatekeeper IP is not assigned..  
Please assign the Gatekeeper IP for the Gatekeeper to work.

**Gatekeeper is ON.  
Please assign  
the phone no. or alias.**

Gatekeeper is set to ON but the phone no. or alias is not assigned.  
Please assign the phone no. or alias.

**NAT is ON.  
Please assign the NAT door.**

NAT is set to ON but the NAT door is not assigned.  
Please assign the NAT door so the NAT can work.

## Other problems

Your BVP 8770 is reliable and easy to use. If you encounter any problem while using this product, please refer to the table below for possible solutions.

### Power Indicator OFF

-  Plug power adapter in the power outlet in the wall.  
Plug the power cord in the unit.  
Turn on the power switch.

### No image is displayed on LCD screen

-  Make sure the power indicator is ON.  
If auxiliary video input is used on TV, select the appropriate video input for TV.

### The unit is not responding when the "OK" button is pressed

-  Be sure the RJ-45 wire is plugged into the "WAN" jack directly on the BVP 8770.

### Can not dial an IP address

-  Plug RJ-45 cable into "WAN" jack on the unit.  
Plug RJ-45 cable from wall socket into "WAN" jack on the unit.

### Video of local view is dark

-  Increase light on the image and reduce back lighting.

### Video in local view has a red cast

-  Aim the BVP 8770 at a strong white light source momentarily.  
Increase the room light level.

### Video connection is not established correctly

-  Hang up and call again.  
Make sure the remote video phone is compatible with H.323 standard.  
Ask the other party call you.

### Green or yellow blocks appear in the remote picture

-  Probable cause is bad connection (noisy line). Hang up and try again. This time, ask the other party to call you.

# 10 Tech Support

In the event of not finding the solution to your problem, please contact your local distributor. You may also contact our technical support staff, E-mail to <service@leadtek.com.tw>.

**Product name:**

It will be easier for our staff to answer your question if you know the name of the product.

**Detailed description of your problem:**

Please describe in detail all the problems you encountered, including the kind of software and hardware you are using, and the contents of your system files.

# 11 Limited Warranty

Leadtek warrants to the original purchaser of this product that it shall be free of defects resulting from workmanship or components for a period of one (1) year from the date of sale. Defects covered by this Limited Warranty shall be corrected either by repair or, at Leadtek's discretion by replacement. In the event of replacement, the replacement unit will be warranted for the remainder of the original one (1) year period or thirty (30) days, whichever is longer. THERE ARE NO OTHER ORAL OR WRITTEN WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Limited Warranty is nontransferable and does not apply if the product has been damaged by negligence, accident, abuse, misuse, modification, misapplication, shipment to the Manufacturer or service by someone other than the Leadtek Transportation charges to Leadtek are not covered by this Limited Warranty. To be eligible for warranty service, a defective product must be sent to and received by Leadtek within fourteen (14) months of the date of sale and be accompanied with proof of purchase. Leadtek does not warrant that this product will meet your requirements; it is your sole responsibility to determine the suitability of this product for your purposes. Leadtek does not warrant the compatibility of this product with your computer or related peripherals, software.

LEADTEK'S SOLE OBLIGATION AND LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT. THE MANUFACTURER SHALL NOT, IN ANY EVENT, BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIABILITY IN TORT RELATING TO THIS PRODUCT OR RESULTING FROM ITS USE OR POSSESSION.

This limited warranty is governed by the laws of Taiwan.

# 12 FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of 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 or more 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.
- Shielded interface cables must be used in order to comply with emission limits. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.