BCM

Wireless VoIP Phone

WLAN800 User Guide

BCM Communication Co., Ltd.

Specifications

Phone Feature	
◇Key Features	★ **Skype** Supported -- • Presence • Skype Talk • Skype Out (with SkypeOut Country Code) ★ **MSN** Supported -- • Presence • IM • MSN Talk ★ Multiple Media Supported -- • **IP TV** • **IP Radio** • **IP Camera – Web Cam Streaming** ★ IE Browser Supported ★ Hot Spot Auto-Login ★ Auto Provision Supported

◇Features	★ Phone book-- • 250 Records
	        • with fields for name, numbers, ring tone, speed-dial, email information
	★ VoIP -- • 3-Way Conferencing • Caller ID Presentation Restriction
	        • Call Hold and Resume • Call Forward (Unconditional,Busy,Timeout)
	        • Call Transfer • Call Waiting and Retrieve • Speed Dial
	★ Multiple Languages -- • English • Spanish
	★ Voice Mail Indication
	★ Date & Time (NTP Time Synchronization)
	★ Wallpaper
	★ 10 Wireless Profiles – Auto-scan / Auto-login
	★ Call History : 20 Records
	★ Software Upgrade through Internet
	⚠ Please note that local variations may apply.

Specifications	
◇Display	★ 2.2" QVGA TFT LCD ★ 240x320 pixels with 65,536 colors
◇Size	135 x 45 x 18 mm
◇Weight	120 g / 4.2 oz
◇Power	★ 3.7V 1250mAh LI-ION Battery ★ 5V 1.0A AC Adapter, 100V~240V

Performance Characteristics

◇Frequency	• 2.4GHz • FCC--Channel 1~11 Supported • CE—Channel 1~13 Supported • JP—Channel1~14 Supported
◇Transmit Power	11dBm for 802.11b/g
◇Radio Range	Outdoor up to 300m via Embedded Antenna
◇External Interface	• One mini-USB Socket (For Charging Only) • One Stereo Earphone Jack ⚠ Stereo sound can only be heard with a compatible stereo headset
◇Memory	• 32MB Flash • 64MB SDRAM ⚠ Please note that actual free memory may vary due to phone pre-configuration.
◇Voice Protocols	• SIP v2 Session Initiation Protocol (RFC3261) • SDP (RFC2327) • SIP Session Keep Alive
◇Voice Codec's	• G.711(A-law and μ-low) • G.729a/b
◇DTMF Transmission	• In-band • Out-band(RFC2833)
◇Voice Quality	• G.168 Echo Cancellation • Jitter Buffer Control (Default 180ms, Max 900ms) • VAD-Voice Activity Detection
◇OS	Microsoft Windows CE 4.2
◇Management Features	• AES or SSL Encryption • HTTP/ HTTPs/ FTP Supported for Firmware Upgrade • HTTP/ HTTPs Supported for Configuration Change • Embedded Web Configuration Interface (With Password Protection)
◇Battery Life	• Standby Time up to 60 Hours • Talking Time up to 3 Hours ⚠ Battery talk and standby times are estimates only and depend on network configuration, signal strength, features used, battery age and condition, charging practices, temperatures to which battery is exposed, and many other factors. Please note that the amount of time a phone is used for calls, Skype, or MSN will affect its standby time. Likewise, the amount of time that the phone is turned on and in standby mode will affect its talk time.

Network Characteristics

◇Network Protocols	TCP/UDP/IP, IPV4, DNS, SDP, ARP, ICMP, DHCP Client, Static IP
◇Security	• WEP (64 and 128 bit) • WPA-PSK Encryption Supported

Phone Panels

1   Center Key / Navigation Pad
˙For a quick access to start Wi-Fi connection, or Open IE at the stand-by mode
˙To activate a selected item or confirm an entry.
˙Use Navigation pad to scroll items on the current menu.
˙Use Navigation pad to control the cursor for a webpage.

2   Left Soft Key
˙To open Menu at stand-by mode
˙To select an action item shown on the current menu.
˙To Edit or activate Option of a selected item.

3   Right Soft Key
˙For a quick access to Phonebook.
˙To Return or Exit from the current menu by layers.

4   Answer / Make-Call Key
˙To answer or make calls.

5   Power / End-Call Key
˙Press and Hold for few seconds to Power On/Off your phone.
˙To end a call.
˙To exit the current menu and skip back to stand-by screen directly.

6   Voice Mail Fast Dial Key (Numeric Key "1")
˙Press and Hold for few seconds to speed dial for voice mail.

7   Alphanumeric Keypad
˙0~9 input number and characters

8   Numeric / Alpha Turn Key
˙Press twice to enter the sign " + " before a country code while making a call.
˙To switch between capital(A,B,C)/lowercase(a,b,c) letters, and numbers(1,2,3)

9   Symbol Selection or Space Key
˙Press and hold for few seconds to Lock Keypad
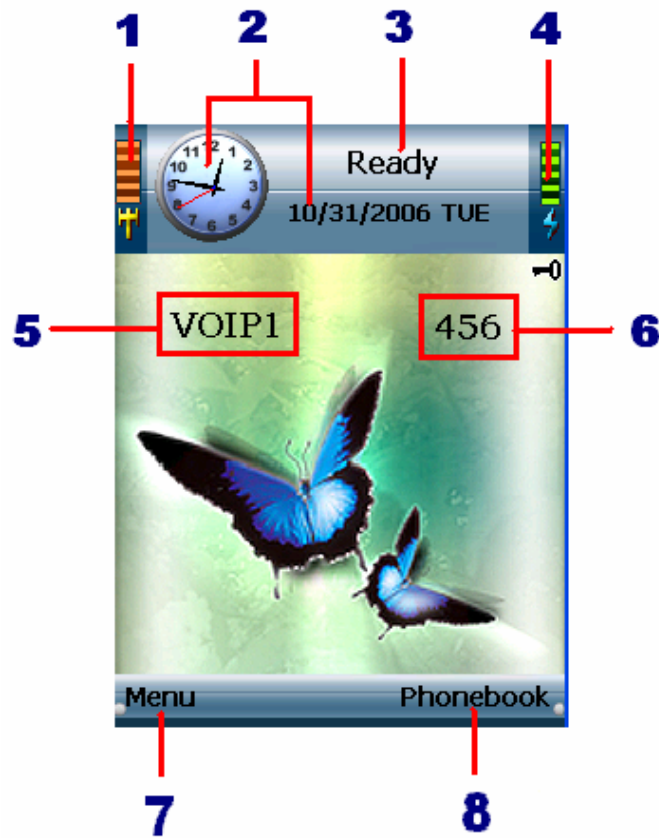˙To open the Symbol selection menu.

10   Screen Light Control Button
˙To keep the screen light on while IP TV, IP Radio, or IE performing.

11   Volume Adjustment Buttons
˙To adjust Volume.

Status Information

Information Bar

1. **Wireless Signal Strength**

   Indicates current Wi-Fi (also WiFi,wifi,etc.) network signal strength.

2. **Clock & Date**

   Displays current time and date. Synchronization can occur only when connecting to the internet.   Within Phone Settings you can set the time properties in "Date &Time" settings.

3. **Phone Status**

   Displays current Communicator information at stand-by screen. "Skype","MSN" or "Ready" means you are available for Skype/MSN/SIP calls (Meanwhile the power LED will flash in blue.) When the power LED flashes in red means you are not available for all communicators.

   Displays a highlighted item for action when you navigate through menus.

4. **Battery Status**

   Indicates current status of battery power remains.

5. **Network Name (SSID)**

   Displays the SSID you selected to connect.

6. **SIP Phone Number**

   Displays your SIP number provided by your service provider when you register on a SIP server successfully. If not, the indicator will not be shown.

Tool Bar

7. **Left Soft Key Action**

   Indicates the action of current menu Generally for "Select" or "Edit" usages. At the stand-by mode, it is user menu access.
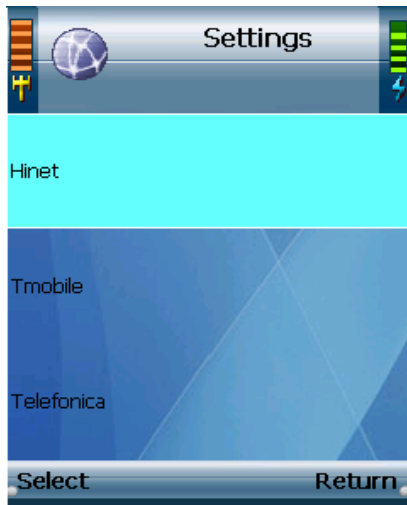
8. **Right Soft Key Action**

   Indicates the action of current menu Generally for "Return" or "Exit" usages. At the stand-by mode, it is Phonebook quick access.

Power LED Indicator

WLANs Configuration

·Auto Hot-Spot Log-in

<Hint>   Menu --> Phone Settings --> Wireless --> Hotspot

<Note>When you stay in a Hotspot coverage, the unit will pop
        out IE browser to notify and log in automatically.
    1 If you already have a Hotspot account, select the Hotspot in "Settings."
    2 A list of settings will be displayed. Edit your account information,
      press Center key to save and then return.

·Set Your Wireless
        1 Wireless Networks(WLANs) Scan
            ·Power on your phone, it will auto-scan WLANs nearby.
            ·To set WLANs by manual, Select from menu or press Center key
              at stand-by mode. The unit will start to find available WLANs.
    <Hint> Menu --> Phone Settings --> Wireless --> Set WiFi.
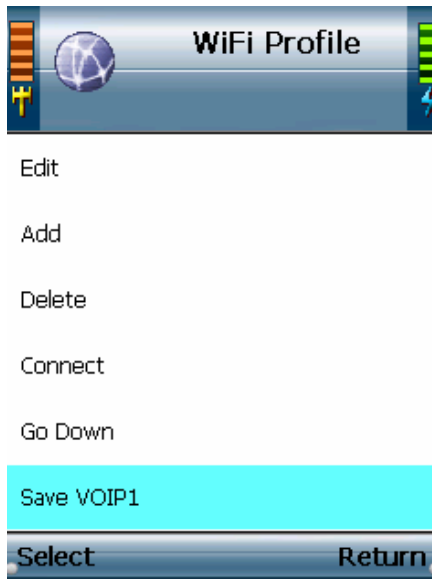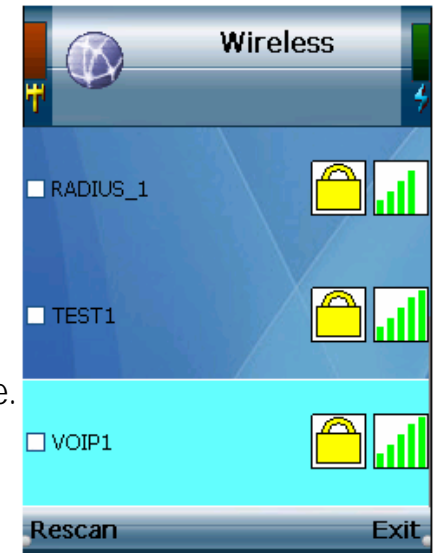   2   A list will display, select a SSID you want to join in.
    3   The Key Index will pop out if a WEP Key / WPA Key is required.
            Enter the Key and then press center key, the connection will continue.
        4   Select Exit when WLAN connection successfully,
              or press left soft key to Rescan and then connect again.
              You can enjoy your Wireless World NOW !!

Set Your WiFi Profile
    <Hint> Menu --> Phone Settings --> Wireless --> Profiles
        ·Select "Add" in Option to set the information of a WLAN you want as a location profile.
        ·You can save the current connected WLAN as a location profile in Option.
    <Note>·If a location profile for the scanned SSID already exists, it will be used as the first choice to connect.
            ·If you were disconnected by an access point, the unit will reconnect to the same AP automatically.
        <Tip> ·In "Option" you can manage the profile in order, Edit the settings, or select to Connect.

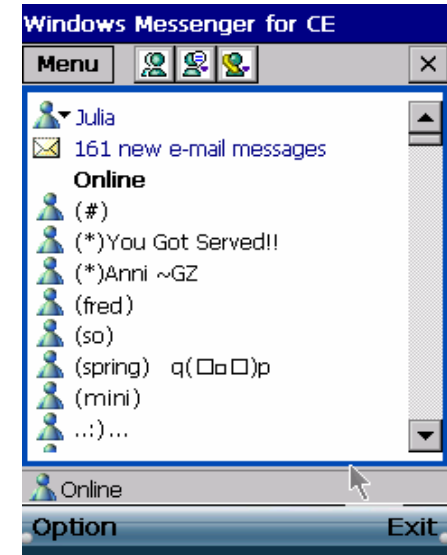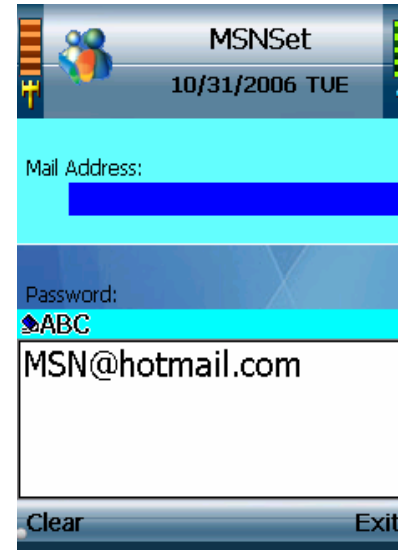# Do You Messenger

Before You start

Make sure your network has an active internet connection.

Sign in your MSN account !

If you have not yet registered MSN ever,

Go to MSN website and sign up for service!

<Hint> Menu --> MSN --> Settings

1 Edit your MSN registered Mail-address and password in Settings,
   press center key to save and then return.
2 Scroll to "MSN", select it to sign you in. Now MSN will log in automatically.

MSNSet
10/31/2006 TUE

Mail Address:

Password:
ABC
MSN@hotmail.com

Clear   Exit

Windows Messenger for CE
Menu   ×

Julia
161 new e-mail messages
Online
(#)
(*)You Got Served!!
(*)Anni ~GZ
(fred)
(so)
(spring) q(□o□)p
(mini)
..:)...

Online
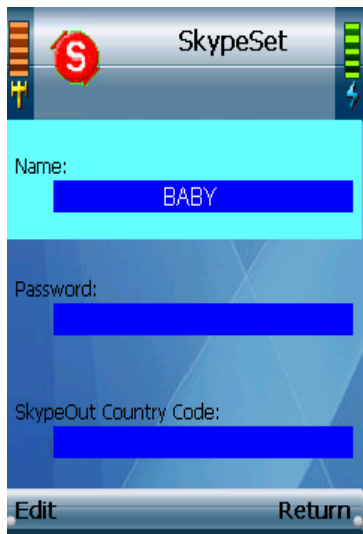
Option   Exit

Sign in your Skype account !

If you have not yet registered Skype ever,

Go to Skype website and get a Skype Name!

<Hint> Menu --> Skype --> Settings

1 A list of Skype settings will be displayed.
   Select "Edit" to enter your Skype account information—
   Name, Password, and Skypeout Country Code (if you have one).
2 Scroll to "Skype", select it to sign you in. Now Skype will login automatically.

SkypeSet

Name:
BABY

Password:

SkypeOut Country Code:

Edit   Return

skype™

Signing In
• • • • • • •

Tools Call

Option   Exit

<Note>You need ONLY 1 Time to set your Skype/MSN account information until you want to
log in by different account. To use another account? Please follow the steps above.
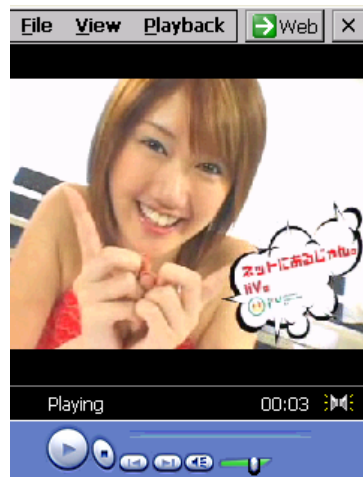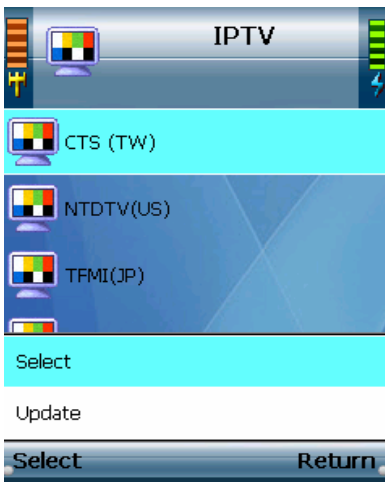
Enjoy Your Multi-Media

IP Radio

<Hint> Menu --> IP Radio --> Option --> Select/Update

1 Use "Select" in Option to turn on the channel you want,
   or press Center key to launch IP Radio !
2 By selecting "Update" in Option, the IP Radio Channel list will auto-update.

<Note> Use Navigation pad to switch channels on the list.

IP TV

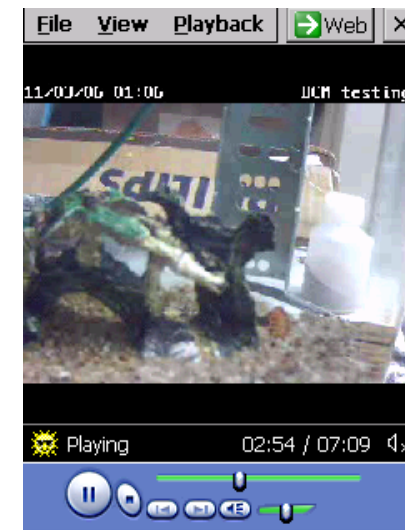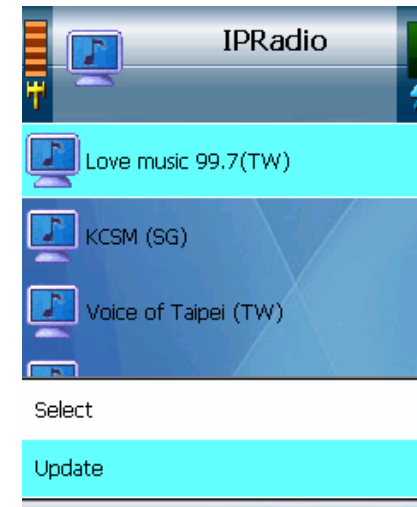   <Hint> Menu --> IP TV --> Option --> Select/Update

   1 Open IP TV Channel list menu, you can press Center key or
      Use "Select" in Option to turn on a channel you want!

   2 By selecting "Update" in Option, the IP Radio Channel list will auto-update.

   <Note> Use Navigation pad to switch channels on the list.

Web Camera

<Hint> Menu --> Web Cam --> Option --> Edit/Add/Delete

1 To watch web camera streaming, you need to set up your web cam path first.
   In Option, you can set up the information of your web cam connection--URL,User Name,
   and Password (if required). Press center to save and then return.
2 Select a Web camera you want to connect by the profile list, the unit will fill in the user name
   and password automatically then connect to the selected web camera.
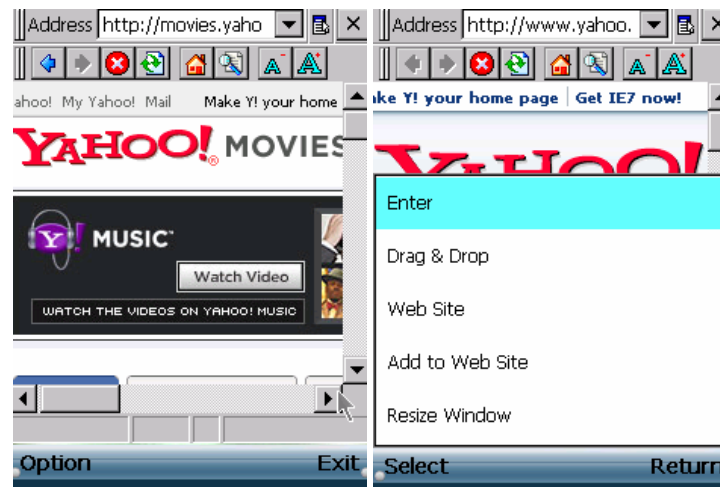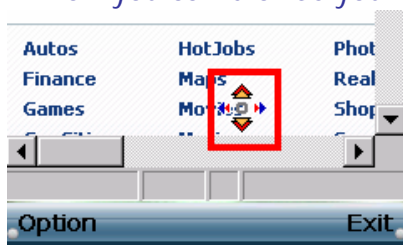
Basic Use

IE Browser

<Hint> Menu --> Web Site --> Option --> Add/Edit/Delete

1   Select "Add" to enter web site settings and edit the website information as a profile.
    Use center key to save and then return.
2   In Option you can manage the Website profiles by Edit or Delete.
    Now you can browse your favorite website by just 1 click center key on the list!

<Tip> A cursor will appear at a webpage, use it for surfing internet!
        To auto-scroll the webpage, press and hole the center key for 2 seconds
        until you see the cursor turn to a blue one, press and hold for another additional
        2 seconds till the cursor turns to an orange one, it is used for a page up/down scrolling navigation.

Make A Call…

Before You Start

Make sure you already have a SIP account pre-set in the unit by your service provider.
If you do not have a SIP number, please contact your service provider.

1   You are available to make a call only when it shows "Ready" and a phone number at the stand-by screen
    with the power LED flashing in blue, If not, please register on your SIP server first.
2   Enter the phone number directly at stand-by screen, and press the make-call key. Now you are online.
3   You can select Option during a call connected, there are several line options available.
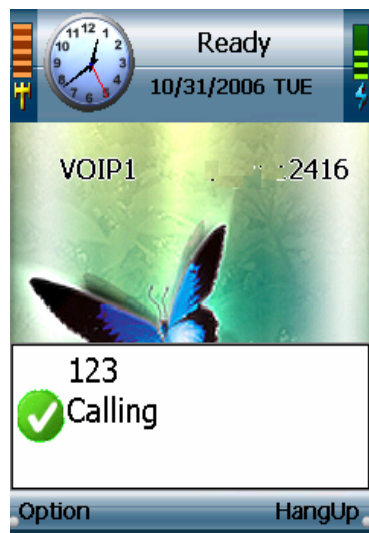   You can make any line action anytime by selecting from the line options list.

<Tip> To change the volume during a call, You can use the side buttons to adjust Volume.

SIP Settings

<Hint>   Menu --> Phone Settings --> SIP Settings

• If you want to show your name to people you call, edit your "Display Name" in SIP Settings.

For More You Should Know

Phone Password

<Hint> Menu --> Phone Settings --> Phone Password

1. By pressing "Edit" to Enable or Disable Phone Password.
2. To set a phone password, please select Edit and then use center key to save it.
   Once you Enable Phone Password, the unit will ask you to enter the password at the phone every start-up.
   Default password is number "0000". If you forget your password, please contact your service provider.

Auto Keylock

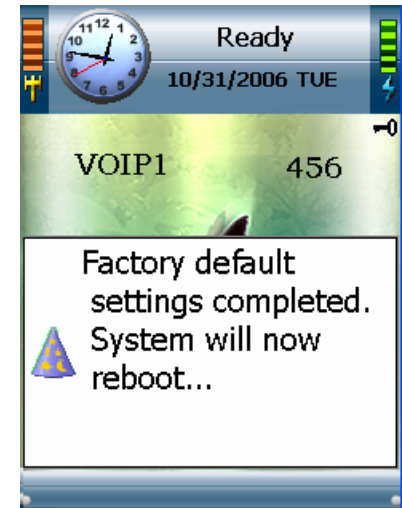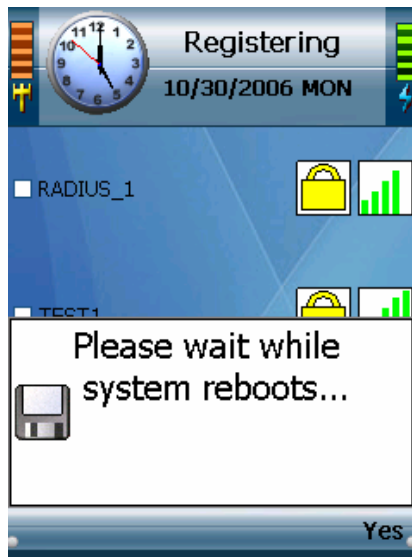<Hint> Menu --> Phone Settings --> Auto KeyLock Settings

Select Edit to enable auto Keypad lock. **To Unlock keypad, press Unlock and then press "∗" key.**

Factory Default

<Hint> Menu --> Phone Settings --> Factory Default

·Select Factory Default to reset your phone settings to factory.default values.
  Your phone will reboot automatically when the progress completed.

Auto Update

Your phone will auto update the data base from your service provider — Instantly when you Online.

Check Information of your phone

<Hint> Menu --> Phone Settings --> Information

Displays your phone number, IP Address (only shown when you connect on a network),

Wireless AP (the current connected one), MAC Address and Firmware Version.

For More to set…

NOW Enter Phone Settings to set by your personal need!
·Ring Option
·Keypad Tone
·Wallpaper
·Language—English / Spanish(Espanol)
·VoiceMail

Regulatory Information

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.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
BCM declares that WLAN800 (**FCC ID: RPW-WLAN800**) is limited in CH1~CH11 for 2.4GHz by specified firmware controlled in U.S.A.

On Copyrights and Warranty Information

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- Other products and brands mentioned herein maybe trademarks or registered trademarks of their respective owners.
- Unauthorized changes or modifications to this device may void your authority to operate the equipment.
- This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary.
- This product includes Skype™ Version V1.1.0.20. **This product uses the Skype API but is not endorsed or certified by Skype.**
- IP TV, IP Radio, films, pictures and other materials may be copyrighted. Unauthorized recording of such materials may violate copyright laws.
- Use, transfer, or distribution of part or all of this product in any form without the prior written permission of BCM is prohibited.
- Certain features, such as Skype, MSN, IP TV, IP Radio are branded services provided by third parties. BCM does not guarantee such services or warrant their continued availability.

Limited Warranty

- BCM warrants to you that, for a period of one year (the "Warranty Period"), your equipment will be substantially free of defects in materials and workmanship under normal use. Your exclusive remedy and BCM's entire liability under this warranty will be for BCM at its option to repair or replace the product or refund your purchase price less any rebates. This limited warranty extends only to the original purchaser.
- This product (including document, contents, and firmware of this device) is provided "AS IS". Except as required by applicable law, no warranty of any kind, express or implied conditions, representations and warranties, including but not limited to all implied warranties and conditions of merchantability and fitness for a particular purpose and non-infringement. BCM reserves the right to make changes, improvements, revises or withdraw to any of the product at anytime without prior notice.
- If the product proves defective during the Warranty Period call BCM technical support in order to obtain a return authorization number, if applicable. If you are requested to return the product, mark the return authorization number clearly. You are responsible for shipping defective products to BCM.
- This warranty does not apply if the product (a) has been altered, except by BCM, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by BCM, or (c) has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident. In addition, due to the continual development of new techniques for intruding upon and attacking networks, BCM does not warrant that the product will be free vulnerability to intrusion or attack.

- To the extent not prohibited by law, BCM is liable for any loss or damaged data, any revenue or profit, or for special, incidental, consequential, indirect or punitive damages, regardless of the theory of liability (including negligence), arising out of or related to the use of or inability to use the product (including any software) howsoever caused. The foregoing limitations will apply even if any warranty or remedy provided under this agreement fails of its essential purpose. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Note for Use

- The availability of particular products may vary by region. Screen shots in this manual may be different from the actual displays in the supplied software.
- IP communication is not a replacement for your ordinary telephone and not able to be used for an emergency call
- The LCD of your device is designed with precision technology. However, in some cases, individual pixels may remain lit or may not light at all. Also, the brightness of the display may appear inconsistent, depending on the angle of view. Such anomalies are caused by the nature of the LCD and do not indicate a malfunction. Please note that BCM does not guarantee a replacement or refund for such cases. Do not expose the LCD to direct sunlight for prolonged periods of time. It may result in a malfunction. Do not store your device in areas subject to sunlight, such as near windows, and be careful when using outdoors.

For additional information or trouble shooting help about this product

Declaration of Conformity	**Address :**
	8F, No. 3, Wolung St., Taipei Taiwan 106 R.O.C.
Trade Name :	**Telephone No. :**
BCM	**886-(2)-2377-2003**
Model No. :	**Visit:**
WLAN800	**http://www.bcmcom.com.tw**
Responsible Party :	**E-mail support:**
BCM Communication Co., Ltd.	**sales@bcmcom.com.tw**