

INSTALLATION GUIDE

LAN Cordless DUALphone

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WELCOME

Thank you for purchasing the LAN Cordless DUALphone. This guide describes how to install the LAN Cordless DUALphone, enabling you to make Internet calls, landline calls, and receive on-screen information services. Included in this guide is also a brief description of the basic functions of the DUALphone and a troubleshooting section.

Note that throughout this guide, we refer to the LAN Cordless DUALphone as DUALphone. For detailed information about all the features of the DUALphone, please refer to the user manual on our website. On the website, you can also find a detailed troubleshooting guide and information about how to contact product support:

www.dualphone.net

Have your serial number and MAC address ready when contacting support. You find the numbers on the bottom of the gateway. For inquiries concerning telephony services, contact your Internet Telephony Servicewider. For inquiries concerning your broadband connection, contact your Internet Service Provider (ISP), and for inquiries concerning on-screen information services, contact your information services provider.

For the EU: The telephone's conformity with EU directives is confirmed by the CE symbol. We hereby declare that the LAN Cordless DUALphone and/or LAN Cordless DUALhandset are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For the US: This equipment complies with Part 15 of the FCC rules and Part 68 of the FCC rules, and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA).

Located on the equipment is a label that contains, among other information, the FCC registration number, and the ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the number of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To ascertain the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs. If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If such advance notice is not practicable, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe this is necessary. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice to enable you to make the necessary modifications in order to maintain uninterrupted service. If the trouble is causing harm to the telephone network, the telephone company may request you to disconnect the equipment from the network until the problem is resolved. This equipment uses the following USOC jacks: RJ11C. It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damage to the equipment caused by local strikes of lightning and other electrical surges.

This product is manufactured for RTX Products A/S. Copyright© 2005. All rights reserved. Any copying or reproduction of the product or its associated user manual is strictly prohibited. For further information, see "FCC and other information" on the Safety Information sheet for the US.

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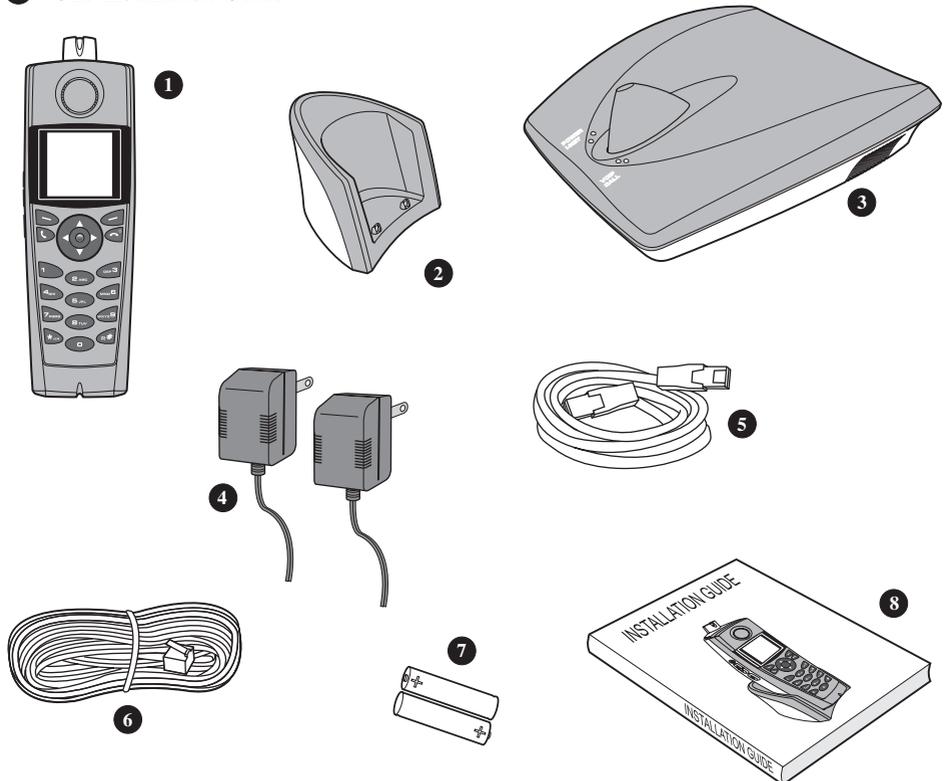
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BOX CONTENTS

The following items are included in the box. If the items found in the box do not match the items on this list, contact the vendor before you start the installation.

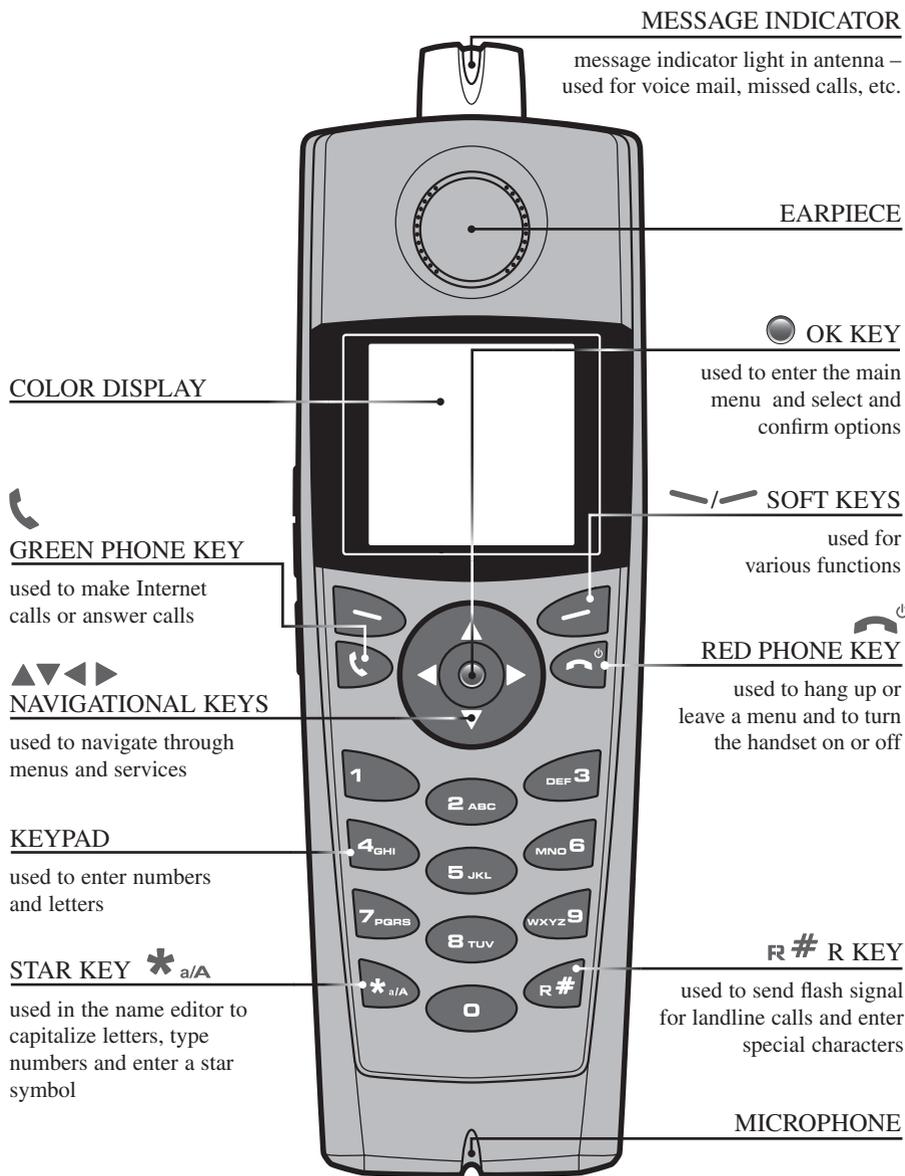
BOX CONTENTS:

- 1 One DUALphone handset
- 2 One DUALphone handset charging cradle
- 3 One DUALphone gateway with LAN and telephone line interface
- 4 Two mains power adapters for gateway and handset charger (note that the connectors at the end of each adapter cord are different: there is one type for the gateway, and another for the handset)
- 5 One Ethernet cable
- 6 One telephone cable
- 7 Two standard rechargeable AA NiMH batteries
- 8 One Installation Guide

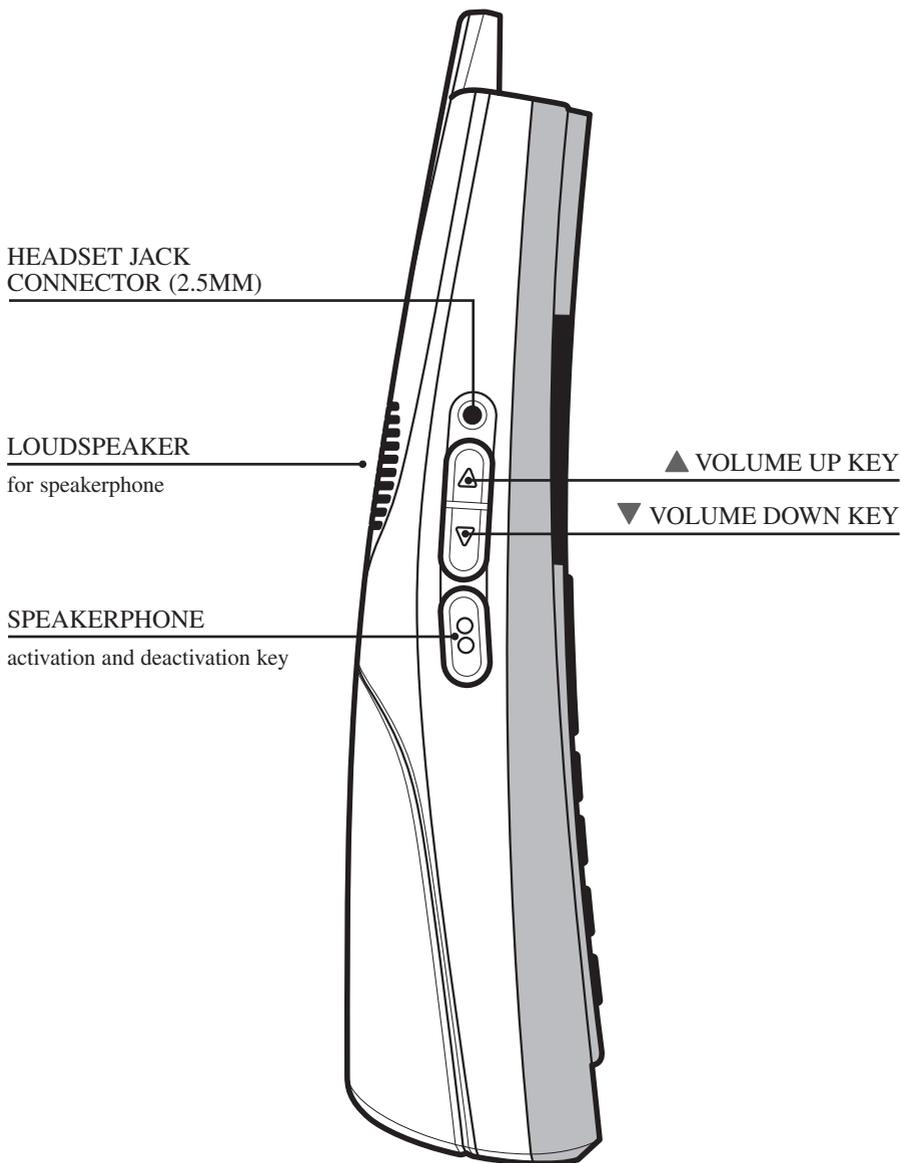


AT A GLANCE

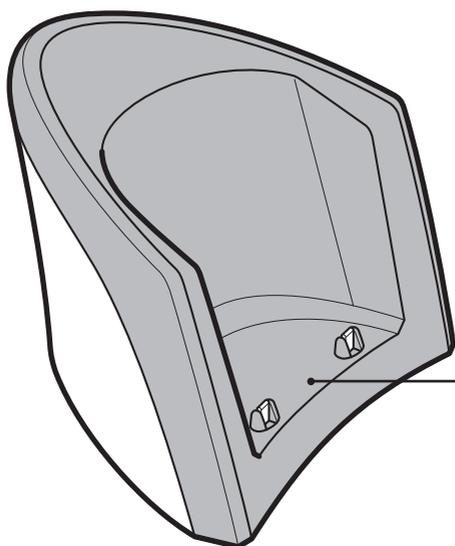
HANDSET - FRONT VIEW



HANDSET - SIDE VIEW

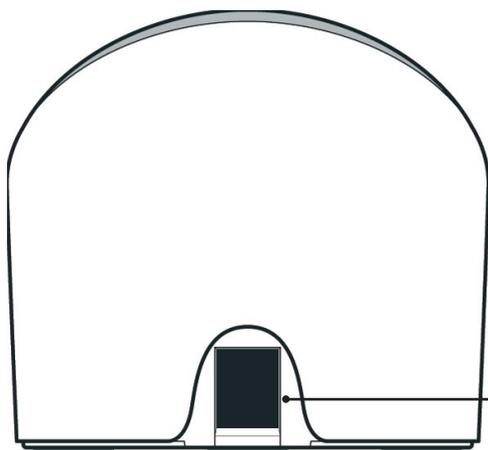


HANDSET CHARGER – FRONT VIEW



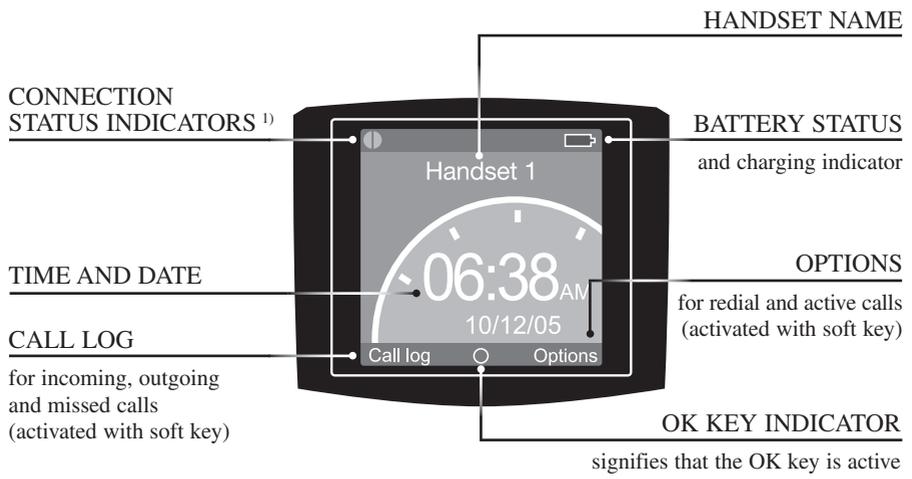
HANDSET
CHARGER

HANDSET CHARGER – REAR VIEW



POWER SUPPLY CONNECTOR
ON HANDSET CHARGER

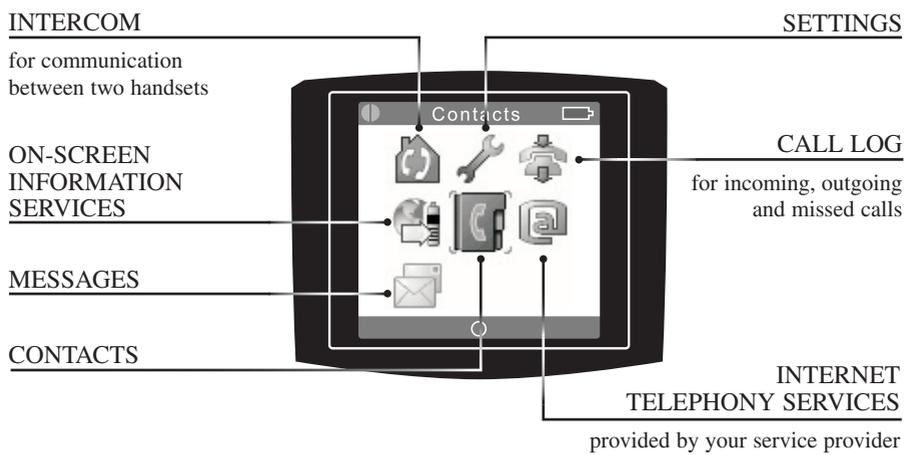
IDLE MODE



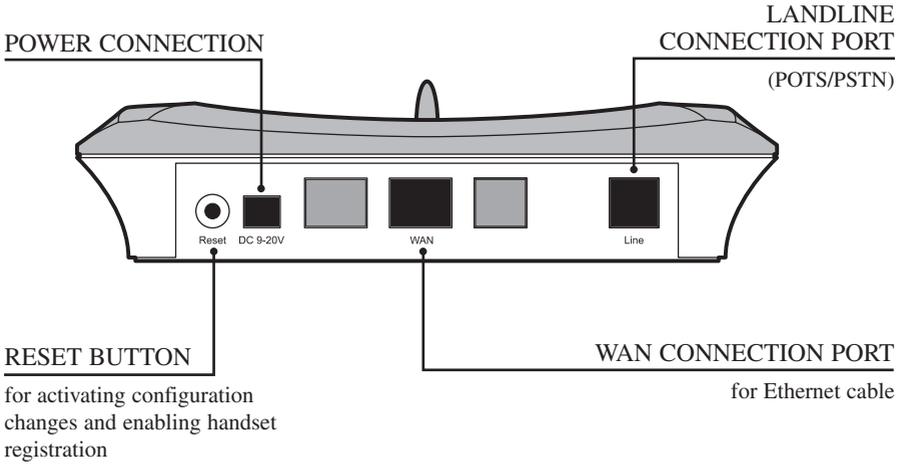
¹⁾

- Black/black - out of range of the gateway
- Yellow/black - within range of the gateway, but not ready for Internet calls
- Yellow/yellow – within range of the gateway, and ready for Internet calls

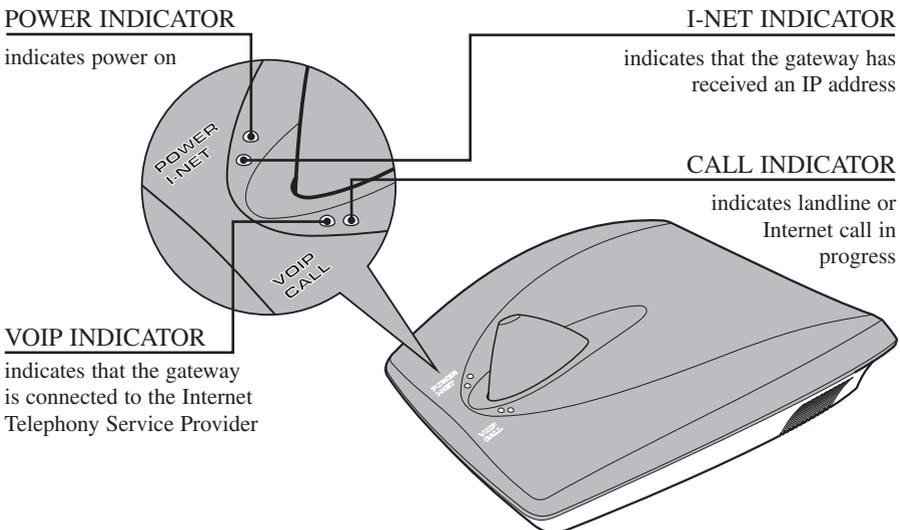
MAIN MENU



GATEWAY - REAR VIEW



GATEWAY - FRONT VIEW



GETTING STARTED

PREREQUISITES

In order to take full advantage of the features of the DUALphone, you need to have the following in place:

- Broadband Internet connection – cable, DSL or equivalent
- Internet Telephony Service Provider subscription – to make Internet calls
- Landline telephone subscription – to make ordinary phone calls

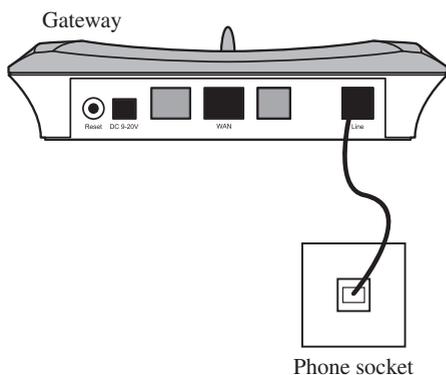
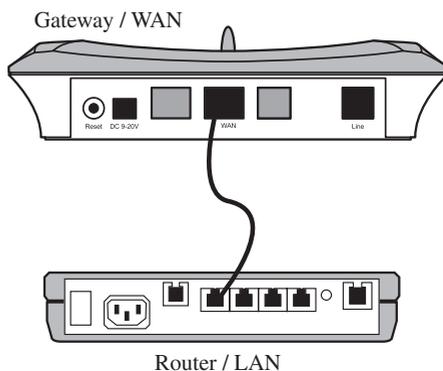
Furthermore, before you start the installation process, make sure that you have the following close to the gateway.

- Wired Ethernet router (standalone or integrated in broadband modem)
- Power outlet for the gateway
- Telephone wall outlet used for landline telephony

NOTE: The gateway can either be placed on a tabletop or mounted on the wall. If longer cables are required, you can use ordinary cable extensions. The handset has an indoor signal range of up to 50 meters (150 feet) from the gateway, and you must place your handset charger within the signal range. Concrete and metal objects might affect the signal range.

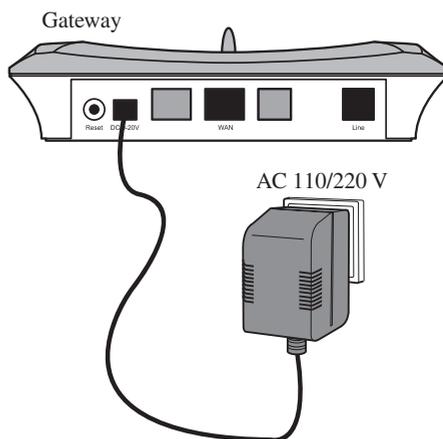
HOW TO INSTALL THE GATEWAY

- 1 To prepare the gateway for Internet telephony, connect the Ethernet cable to the **WAN** port on the gateway and then to a **LAN** port on your broadband modem or router.



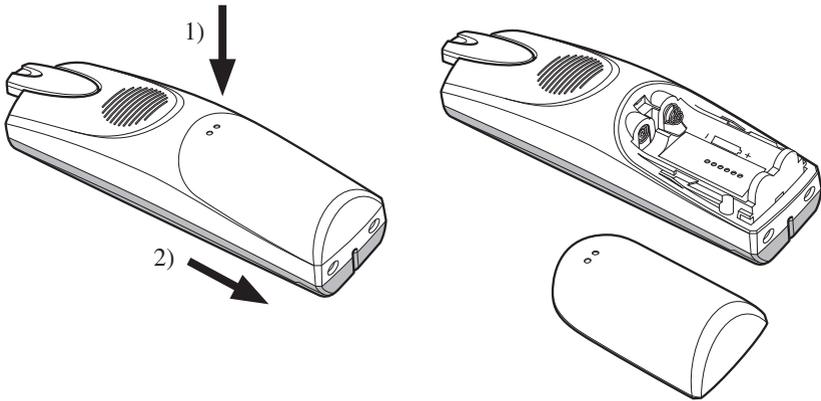
- 2 To prepare the gateway for landline telephony, connect the telephone cord to the **Line** port on the gateway and then to a telephone wall outlet.

- 3 Connect the appropriate power adapter to the gateway and to an active power outlet (preferably a continuous power outlet without a switch to interrupt its power).

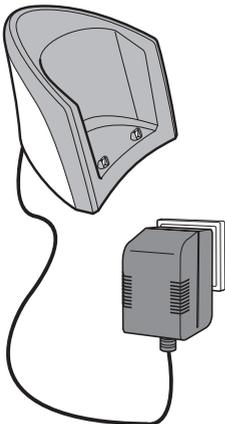
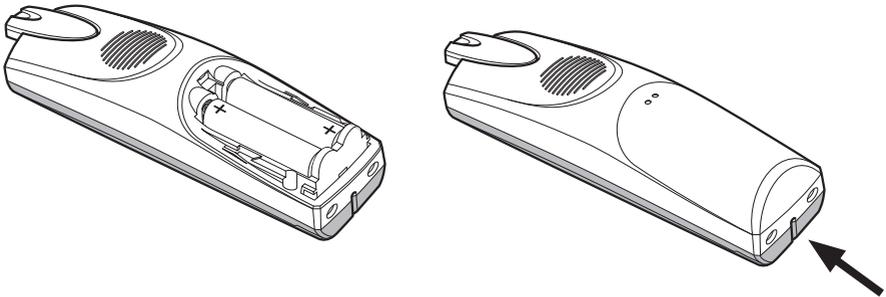


HOW TO INSTALL AND REGISTER THE HANDSET

- 1 Push in and down on the two holes in the back of the handset to release the battery cover.



- 2 Insert the two batteries in the handset, making sure that their plus and minus ends are facing as shown in the illustration, and then slide the battery cover shut.



- 3 Connect the appropriate power adapter to the charger and the other end to an active power outlet (preferably a continuous outlet without a switch to interrupt its power).

- 4 Place the handset in the charger, and charge the batteries. We recommend that you charge the batteries fully before first use. This takes approximately 10 hours. When you place the handset in the charger, the handset automatically registers with the gateway.

NOTE: After registration of the first handset, there is a 5-minute period during which you can register any additional handsets. If you want to register additional handsets after the 5-minute period has expired, press the **Reset** button on the rear of the gateway to start a new 5-minute registration period.



HOW TO CONFIGURE THE DUALPHONE

Your DUALphone may have been pre-configured by the Internet Telephony Service Provider you have purchased it from. If so, the DUALphone is ready for use once you have plugged in all cables and connected the power. Otherwise, please refer to the instructions in the following section on configuring your DUALphone online or using the handset.

You will need the account information that you received from your Internet Telephony Service Provider to complete configuration of your DUALphone. If you have not registered with your Internet Telephony Service Provider yet, you need to do so before you can continue with the configuration.

HOW TO CONFIGURE THE DUALPHONE ONLINE

- 1) Open a browser on your PC and go to **www.dualphone.net**
Go to the **Configuration** page and follow the login instructions.
- 2) You need to enter your MAC address and the default password, which is 1234.
You will be prompted to change the password immediately.
We recommend that you create a strong password to protect your account information from unauthorized access.
- 3) Complete the on-screen form with the account information from your Internet Telephony Service Provider. Typically, you need to fill in the following fields:
 - SIP user name – usually the phone number you received from your service provider
 - SIP password – the password you received from your service provider
 - Registration server – domain name or IP address
 - SIP Proxy – usually the same as registration server
 - Authorization realm/domain – usually the same as SIP proxy
 - Voice mail URL (optional)
- 4) Click **OK**. The gateway is reset automatically.

After a few seconds, both status indicators in the upper left corner of the display will turn yellow, indicating that you have successfully configured your DUALphone. For more detailed information on how to configure your account, refer to your Internet Telephony Service Provider's configuration instructions.

NOTE: If you do not configure your DUALphone on installation, you can only make landline calls. However, you can always complete the configuration at **www.dualphone.net** or use the configuration menu on the handset at a later time.

HOW TO CONFIGURE THE DUALPHONE USING THE HANDSET

If you are unable to complete the online configuration, you can configure your DUALphone using the handset.

- 1) In **Idle** mode, press the **OK** key, choose **Settings**, and then press the **OK** key.
- 2) Choose **VoIP settings** and press the **OK** key. When prompted for a PIN code, enter the default PIN code 1234, and press the **OK** key.
- 3) Choose the listed parameters one by one, press the **OK** key, and then enter the relevant information based on the account details you received from your Internet Telephony Service Provider or broadband provider.
 - Display name (optional) – Caller ID that the called party sees
 - SIP User name – usually the phone number you received from your service provider
 - Authentication Name – usually the same as SIP User name
 - SIP Password – the password you received from your service provider
 - Registration server – domain name or IP address
 - SIP Proxy – usually the same as registration server
 - Authorization realm/domain – usually the same as SIP proxy
 - Voice mail URL (optional)
- 4) Press the **OK** key, and then the **Yes** soft key when prompted to save changes.
- 5) Press the **Reset** button on the rear of the gateway.

For more detailed information, see the user manual. When you have completed the configuration, you are ready to use the DUALphone.

HOW TO CHANGE THE HANDSET PIN CODE

Make sure to change the PIN code after the first login to prevent unauthorized access to your VoIP settings.

- 1) In **Idle** mode, press the **OK** key, choose **Settings**, and then press the **OK** key.
- 2) Choose **VoIP settings** and press the **OK** key. When prompted for a PIN code, enter the default PIN code 1234, and then press the **OK** key.
- 3) Choose **Change PIN code** and press the **OK** key. Enter a new PIN code, and then press the **OK** key.
- 4) Press the **Yes** soft key when prompted to save the PIN code.
- 5) For future reference, write your new PIN code here:

NOTE: The handset PIN code and the online configuration password are independent of each other. Changing the handset PIN code will not affect the online configuration password.

HOW TO CONFIGURE ON-SCREEN INFORMATION SERVICES

To take full advantage of the on-screen information service features, you need to configure the settings of your on-screen information services online.

- 1) Go to **www.dualphone.net**, go to the **Configuration** page, and then click the **Information Services** link.
- 2) Follow the instructions, and specify whether you want to use the default settings, or want to customize the on-screen information services to better suit your needs.
- 3) Click **OK**.

Once you have configured the on-screen information services, you can activate the on-screen information service features in the Info Services menu on the handset. For more detailed information, see the user manual.

RECOMMENDED BASIC SETTINGS

Before you start using your phone, we strongly recommend that you specify the handset language, country selection, time zone, and routing of emergency calls.

HOW TO SPECIFY THE HANDSET LANGUAGE

The handset language setting determines the language in which text on the display is presented.

- 1) In the **Main** menu, choose **Settings** and then press the **OK** key.
- 2) Choose **System settings**, press the **OK** key, and then choose **Language**. Press the **OK** key.
- 3) Select the relevant language and then press the **OK** key.

HOW TO SPECIFY A COUNTRY SELECTION

Setting the country selection properly ensures, among other things, that you can make and receive landline calls and receive Caller ID information on your DUALphone. It is therefore important that you specify in which country you are using the DUALphone.

- 1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
- 2) Choose **System settings**, press the **OK** key, and then choose **Country selection**. Press the **OK** key.
- 3) Select the country that you are in, and press the **OK** key.

NOTE: The handset language and country settings are independent of each other. You can change the handset language whenever you want, but we recommend that you change the country settings only if you bring your DUALphone to another country and want to make landline calls. Also note that you cannot change the country selection in the US version of the DUALphone.

HOW TO CHANGE THE TIME ZONE

Setting the time zone properly ensures that the time displayed in the Idle mode screen corresponds to the time zone that you are in.

- 1) In the **Main** menu, choose **Settings** and then press the **OK** key.
- 2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
- 3) Choose **Time zone**, press the **OK** key, and then select the appropriate time zone. Press the **OK** key.

HOW TO CHANGE EMERGENCY LINE SETTINGS

The default setting for emergency dialing is VoIP (Internet call). However, once you have installed and registered your DUALphone, we recommend that you check what the emergency line settings are.

- 1) In the **Main** menu, choose **Settings** and press the **OK** key.
- 2) Choose **Telephony settings** and press the **OK** key.
- 3) Choose **Emergency line** and choose **VoIP** or **Landline**.
- 4) Press the **Reset** button on the rear of the gateway for the changes to take effect.

IMPORTANT: You must check with your Internet Telephony Service Provider whether they have a service that makes it possible for your call to reach the appropriate emergency call center and for the emergency call center to locate from where you are calling. If not, you must use landline settings for emergency calls. This requires a working landline connection.

QUICK GUIDE

TO...	DO THE FOLLOWING
Turn the telephone on and off	To turn the handset on, long press  . To turn the handset off, long press  .
Make an Internet call	In Idle mode, enter a phone number and press  or  .
Answer a call	Press  .
Enter the main menu	In Idle mode, press  .
Make a landline call	Enter a number and press  Options . Choose Landline call and press  or  .
End a call	Press  to end a conversation, or return the handset to the charging cradle.
Use the speakerphone	To turn the speakerphone on during a call, press  on the side of the phone. To turn the speakerphone off, press  again.
Redial a call	In Idle mode, press  Options and then choose Redial to see the most recently dialed number. Press  to dial the number.
View the call log	In Idle mode, press  Call log , or choose Call log from the main menu. Use the navigation keys to choose between All calls, Missed, Incoming, and Outgoing calls.
Adjust volume	During a call, press  on the side of the phone to increase the volume. During a call, press  to decrease the volume.
Add an entry to contacts	In Idle mode, press  to enter the main menu, and choose Contacts . Choose Options , and then choose Add contact .
Call a contact	Press  to enter the main menu, choose Contacts , select the contact you want to call, and then press  .
Mute the microphone	During a call, press  Mute . To reactivate the microphone, press  Mute off .

TO...	DO THE FOLLOWING
Change the ringer melody	Press  to enter the main menu, choose Settings and then Audio settings . Choose Ringer melody , and then choose the type of call. Browse the list of melodies and press  to choose a melody.
Use voice mail	Sign up for a voice mail account with your Internet Telephony Service Provider. In the main menu, choose Messages , and then Listen to messages .
Use on-screen information services	Press  to enter the main menu, choose Info Services , and then choose Open info portal to see a list of available services. In the Info Services menu, choose Show Push to view the most recent information.
Make simultaneous calls	During an Internet call, choose Options , and then Hold call . Enter the number you want to call, and choose Options and then Landline call .
Capitalize letters	Press *_{a/A} to capitalize letters or write numbers when working in the text editor.

TROUBLESHOOTING

The following is a list of solutions to the most common issues that may occur during installation and use of the DUALphone. Some problems you can easily solve yourself, and some require that you call your service provider.

PROBLEM	POSSIBLE CAUSES
The handset display is black.	<ol style="list-style-type: none"> 1) Handset is in power saving mode. 2) Batteries are drained. 3) Power is not turned on.
The handset does not charge.	<ol style="list-style-type: none"> 1) Power is not turned on. 2) Batteries are not inserted correctly.
The handset registration failed, and the status indicator on the display is black.	<ol style="list-style-type: none"> 1) Handset is out of range of the gateway.
The display says, “ Searching for Gateway ”.	<ol style="list-style-type: none"> 1) Handset is out of range of the gateway. 2) Gateway is not powered.
The POWER indicator on the gateway is not lit.	<ol style="list-style-type: none"> 1) Gateway is not powered.
The I-NET indicator on the gateway is not lit.	<ol style="list-style-type: none"> 1) The Ethernet cable is not connected. 2) The router or modem is not turned on. 3) The gateway cannot retrieve an IP address.
When I make Internet calls, the sound quality is poor.	<ol style="list-style-type: none"> 1) There is too much simultaneous data traffic on your broadband connection. 2) Your Internet Telephony Service Provider’s Quality of Service is based on a “best efforts” rather than a guaranteed voice priority method.

POSSIBLE SOLUTION

- | |
|---|
| <ol style="list-style-type: none"> 1) Press any key. 2) Charge the batteries. 3) Check that the power cord is connected properly, and that power is turned on. |
| <ol style="list-style-type: none"> 1) Check that the power cord is connected properly, and that power is turned on. 2) Check that the batteries are inserted with the plus and minus ends facing the correct way. |
| <ol style="list-style-type: none"> 1) Move the handset closer to the gateway, and turn the handset off, place it in the charger, and then turn it on again. Reset the gateway, and place the handset in the charger. |
| <ol style="list-style-type: none"> 1) Move the handset closer to the gateway. 2) Plug the gateway into a continuous power outlet. |
| <ol style="list-style-type: none"> 1) Check that the gateway power cord is connected properly, and that the adapter is plugged into a continuous power outlet. |
| <ol style="list-style-type: none"> 1) Check that the Ethernet cable between the WAN port on the gateway and the LAN port on your modem or router is connected properly. 2) Turn on the power to the modem or router. 3) In Internet settings, check that the IP mode corresponds to the IP mode of your Internet connection. |
| <ol style="list-style-type: none"> 1) <ol style="list-style-type: none"> a) Reduce the amount of traffic on your broadband connection. b) Configure your router to prioritize traffic on the port the gateway is connected to.
For more information see your router's user manual. c) Sign up for a Quality of Service agreement with your broadband provider. d) Order a connection with higher speed from your broadband provider. 2) Contact your ITSP regarding ensured voice prioritization across the network. |

PROBLEM	POSSIBLE CAUSES
I cannot make landline calls.	<ol style="list-style-type: none"> 1) The landline cable is not connected. 2) The landline connection is out of order.
I cannot make Internet calls, the VoIP indicator on the gateway is not lit, and the right status indicator in the upper left corner of the display is black.	<ol style="list-style-type: none"> 1) The configuration of the DUALphone is not complete. 2) The gateway has not been reset after you saved the configuration. 3) The router or modem has not assigned an IP address to the DUALphone. 4) The router blocks Internet telephony. 5) The router firmware needs updating.
I cannot make Internet calls, but it worked yesterday.	<ol style="list-style-type: none"> 1) The gateway is not logged in at the Internet Telephony Service Provider. 2) The router is turned off. 3) The router is using port forwarding, but the DUALphone has dynamic IP mode enabled. 4) The SIP server is down. 5) The Internet connection is down.
There is no audio when I make Internet calls.	<ol style="list-style-type: none"> 1) The router blocks audio.

POSSIBLE SOLUTION

- 1) Check that the landline cable between the **Line** port on the gateway and the telephone wall outlet is connected properly.
- 2) Contact your landline provider.

- 1) Check that you have configured your DUALphone properly. Go to www.dualphone.net and then go to the **Configuration** page. For more information, see, How to Configure the DUALphone in this guide or in the user manual or contact your Internet Telephony Service Provider.
- 2) Reset the gateway and allow the gateway 2 minutes to log in at your Internet Telephony Service Provider.
- 3) Check that your router or modem is working properly. Check the IP address by pressing the volume up key on the handset while in Idle mode.
- 4) **a)** Try disabling STUN. Open the **Internet** settings menu, choose **STUN mode**, and select **Disabled**. Reset the gateway. For more information, see the user manual or contact your Internet Telephony Service Provider.
b) Use port forwarding. The default SIP port is 5060, and the default RTP port is 5004. If you use port forwarding, you must use static IP mode. For more information, check your router's user manual.
- 5) Check your router's user manual to see how to update the firmware.

- 1) Check that all cables are connected properly, and check that power is turned on, and then reset the gateway.
- 2) Turn on the router.
- 3) Change to static IP mode. For more information, see the user manual. Note that the configured static IP address must agree with the configured port forwarding.
- 4) Contact your Internet Telephony Service Provider.
- 5) Contact your broadband provider.

- 1) Use port forwarding. Check your router's user manual to see how to configure port forwarding.

