Jabra®

Jabra PRO™ 9450

User Manual

www.jabra.com

WELCOME

Congratulations on purchasing your new Jabra PRO 9450. We are sure you will enjoy its wide range of features, and find it comfortable to wear and easy to use.

Jabra PRO 9450 Headset Features

- Up to 150 meters range from headset to base.
- Wideband audio for exceptional sound quality.
- Touch panel volume and mute controls.
- Intuitive headset multi-function button for easy call handling.
- LED and audio indicators.
- Advanced hearing protection with SafeTone™.
- Noise-cancelling microphone.
- Earhook or headband wearing-style (neckband accessory available).

Jabra PRO 9450 Base Features

- Desk phone and softphone connectivity.
- Headset recharge docking cradle.
- Keypad for easy call handling.
- Visual and audio indicators.

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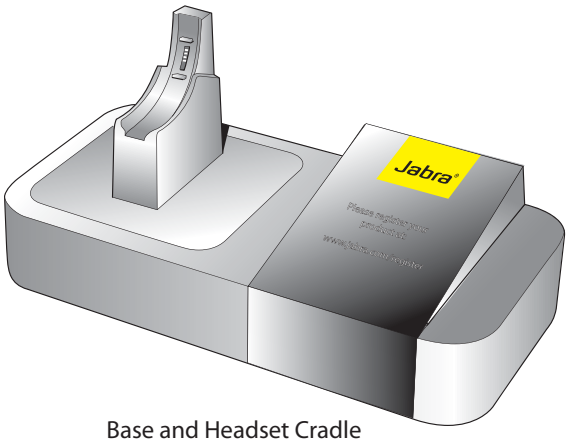
1. PRODUCT OVERVIEW

1.1 PACKAGE CONTENTS

Headset



Base and Headset Cradle

Power Adapter

Headband Attachment

Telephone Cable

Earhook Attachment
(small, medium and large earbuds)

Installation CD
(Jabra PC Suite and User Manual)

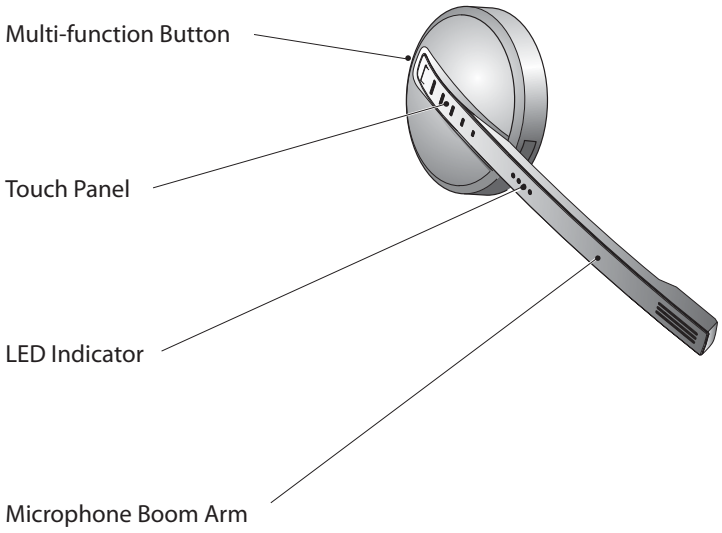
USB Cable

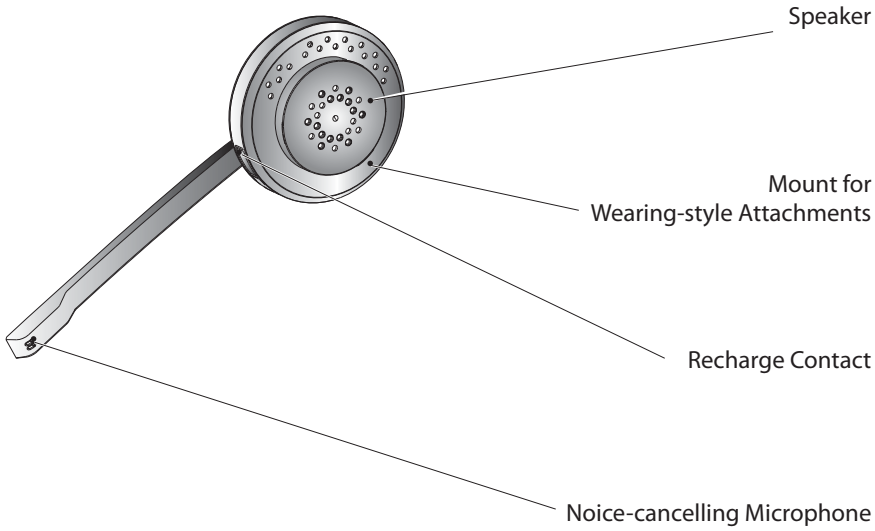
Quick Start Guide

Warning & Declaration Booklet

System-optimized Leaflet

1.2 HEADSET

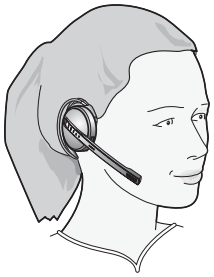




1.3 HEADSET ATTACHMENTS

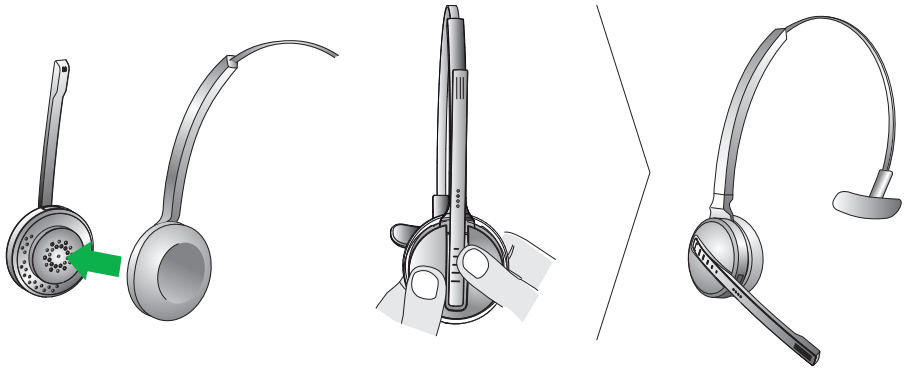
The Jabra PRO 9450 headset can be worn in the headband, earhook or neckband wearing-styles. The headband and earhook attachments are included with the Jabra PRO 9450. The neckband attachment can be purchased separately.

Wearing-styles can be worn on the left or right ear. Regardless of wearing style, ensure the microphone is positioned close to the mouth to maximise noise-cancelling.



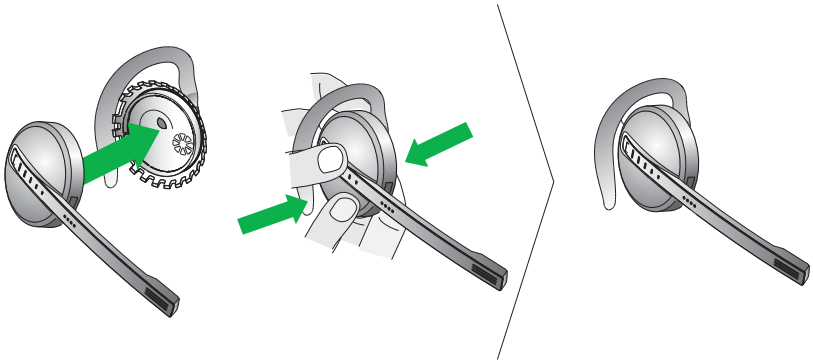
Attaching the Headband

1. Align the headset and the headband wearing-style attachment, as illustrated, and press firmly together until they click into place (snap-to-click).
2. Rotate the microphone boom arm for left or right ear use.
3. Adjust the length of the headband to fit snugly against the head.



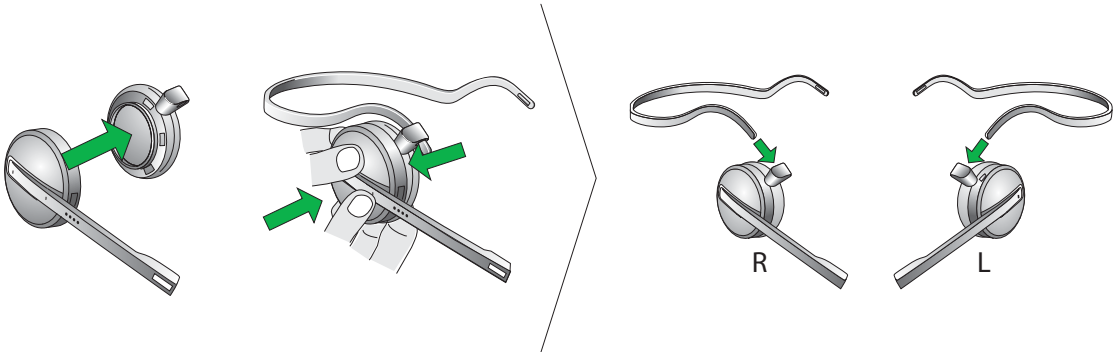
Attaching the Earhook

1. Assemble the earhook wearing-style attachment for left or right ear use. If necessary, remove the earbud and replace with another size for best fit.
2. Align the headset and the earhook wearing-style attachment, as illustrated, and press firmly together until they click into place (snap-to-click).
3. Shape the earhook to fit snugly around the ear.

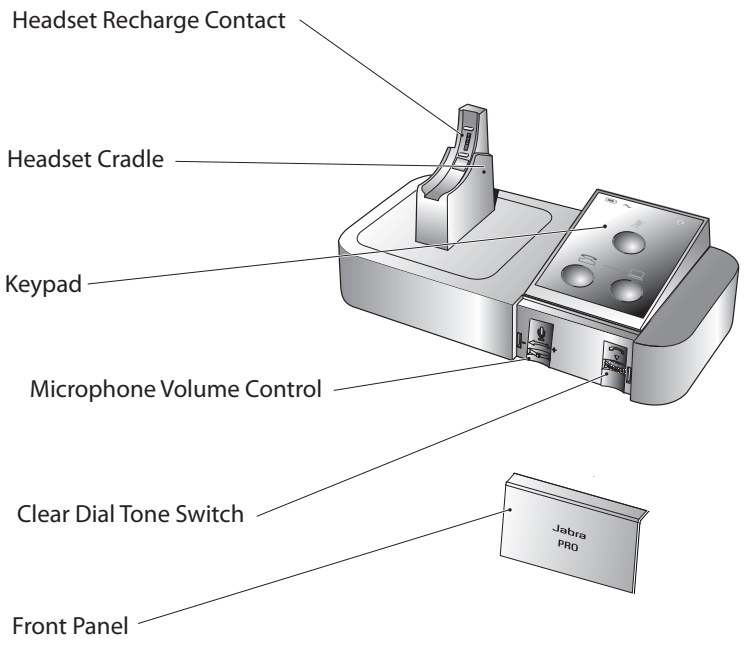


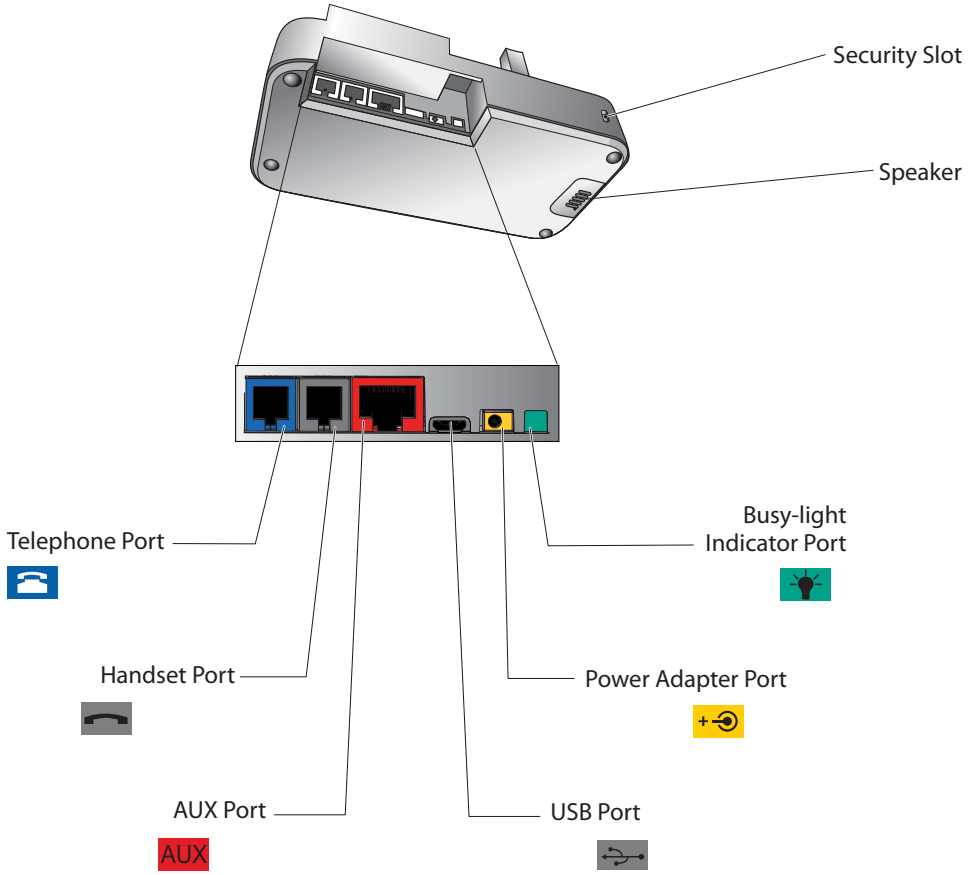
Attaching the Neckband (optional accessory)

1. Decide on left or right ear use, and assemble the neckband attachment, as illustrated.
2. Align the headset and the neckband wearing-style attachment, and press firmly together until they click into place (snap-to-click).



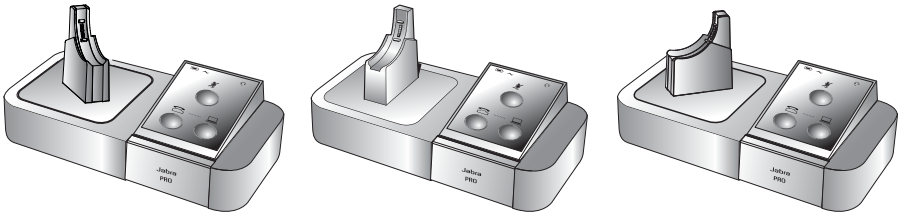
1.4 BASE


Headset Recharge Contact
Headset Cradle
Keypad
Microphone Volume Control
Clear Dial Tone Switch
Front Panel
Jabra
PRO


Security Slot
Speaker
Telephone Port
Busy-light
Indicator Port
Handset Port
Power Adapter Port
AUX Port
AUX
USB Port

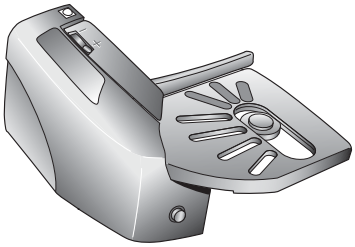
1.5 PREPARING THE BASE

1. Remove the protective foil from the cradle and the keypad.
2. Rotate the cradle for left- or right-handed docking, as illustrated.

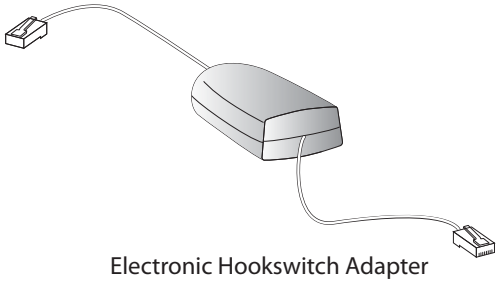


1.6 OPTIONAL ACCESSORIES

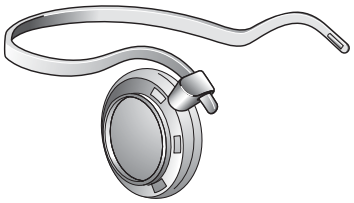
The following Jabra PRO accessories are available separately.



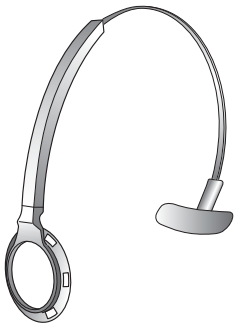
Jabra GN1000



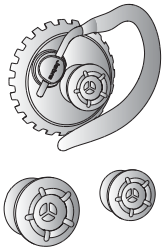
Electronic Hookswitch Adapter



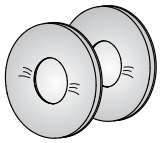
Neckband Attachment



Replacement Headband Attachment



Replacement Earhook, with Earbuds



Replacement Ear Cushions

2. CONNECTING

LAUNCH THE INTERACTIVE SETUP WIZARD ON THE CD FOR ANIMATED SETUP INSTRUCTIONS

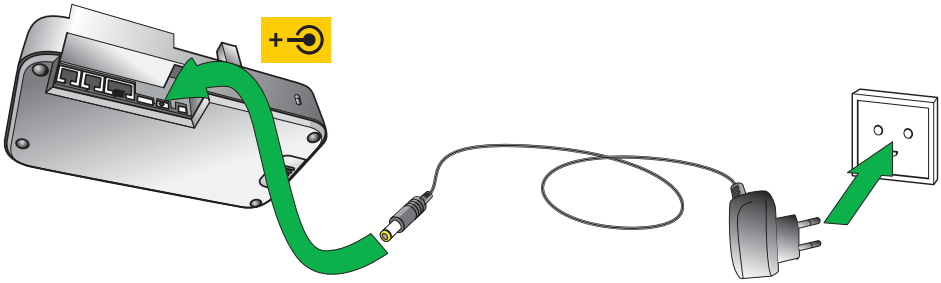
The easiest way to connect and configure the Jabra PRO 9450 is to use the Interactive Setup Wizard on the installation CD. Chapters 2 and 3 of this manual are only needed if the Interactive Setup Wizard is not used.

Refer to the Warning and Declaration guide for important safety instructions prior to installation and use of the Jabra PRO 9450.

2.1 CONNECT TO POWER

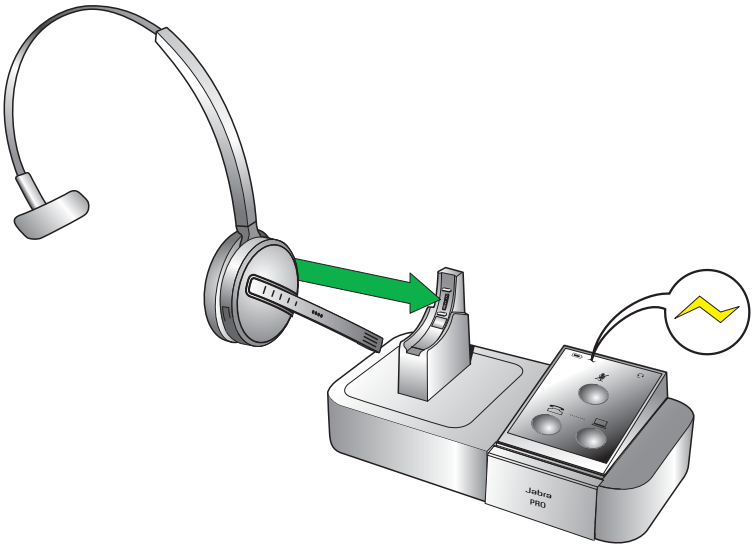
Connect the Power Adapter to the Base

1. Plug the supplied power adapter into the port marked on the base.
2. Connect the power adapter to the mains power socket.



2.2 DOCK HEADSET

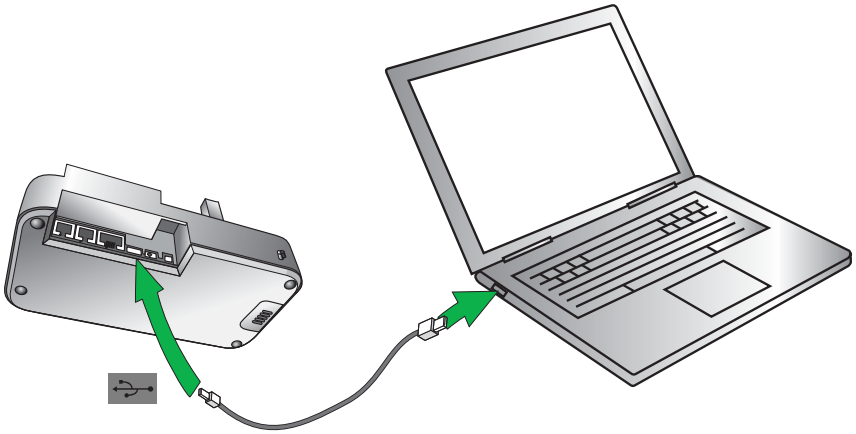
Dock the headset, as illustrated. When the headset is docked correctly the headset battery will begin charging, if needed. Keep the headset docked while connecting the Jabra PRO 9450, or when not in use.



2.3 CONNECT TO PC

Connect a PC to the Base

1. Plug the supplied USB cable into the port marked on the base.
2. Connect the USB cable to any free USB port on the PC.



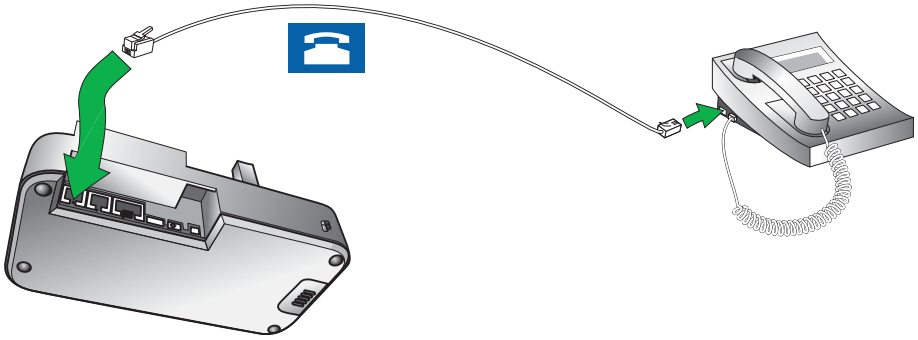
2.4 CONNECT TO DESK PHONE

Connecting to a desk phone will vary, depending on the type of desk phone used. Refer to specific desk phone documentation for connection details.

Connect to a Desk Phone with Headset Port

This desk phone has a dedicated headset port (usually at the back of the phone). These phones typically have a button on the front panel for switching between handset and headset. If the supplied telephone cable does not fit, a special adapter will need to be purchased. Refer to your specific desk phone documentation for details.

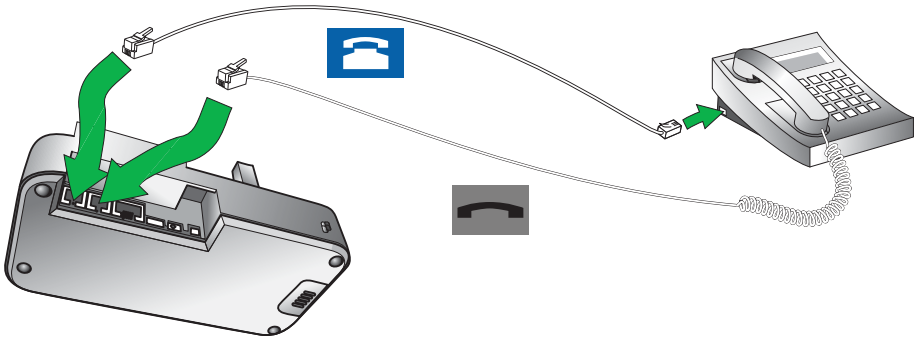
1. Plug the supplied telephone cable into the port marked on the base.
2. Connect the telephone cable to the headset port on the desk phone.



Connect to a Desk Phone without Headset Port

This desk phone does not have a dedicated headset port.

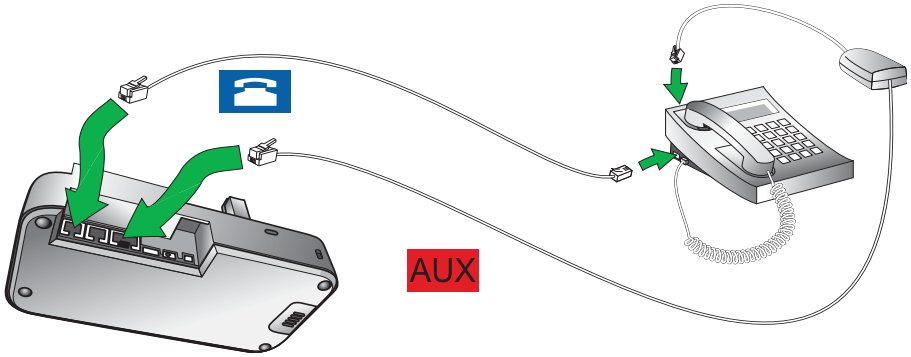
1. On the desk phone, unplug the handset cable from the phone body.
2. Connect the handset cable to the port marked on the base.
3. Plug the supplied telephone cable into the port marked on the base.
4. Connect the telephone cable into the handset port on the desk phone.



Connect to a Desk Phone with Electronic Hookswitch

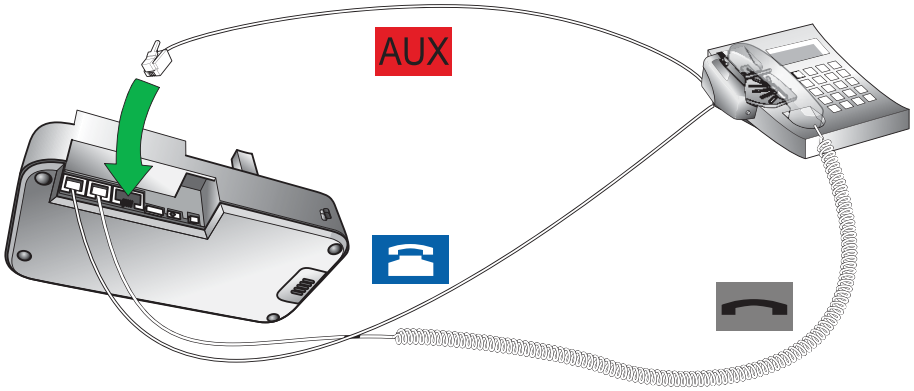
An electronic hookswitch enables an incoming call to be answered or ended by the headset´s multi-function button. If the desk phone has an electronic hookswitch, an adapter will need to be connected between the desk phone and the base. For details on electronic hookswitch compatibility specific to your desk phone, and to purchase the required adapter, visit www.jabra.com.

For specific instructions on connecting an electronic hookswitch adapter to a desk phone, please refer to the cabling documentation supplied with the adapter.



Connect to a Desk Phone with Remote Handset Lifter

A remote handset lifter manually lifts the handset from the receiver to make or answer a call. To connect a remote handset lifter to a desk phone, please refer to specific remote handset lifter documentation.



2.5 CONNECT TO A BUSY-LIGHT INDICATOR

A remote busy light indicator connects to the port marked on the base, and indicates to colleagues when the Jabra PRO 9450 is on a call.

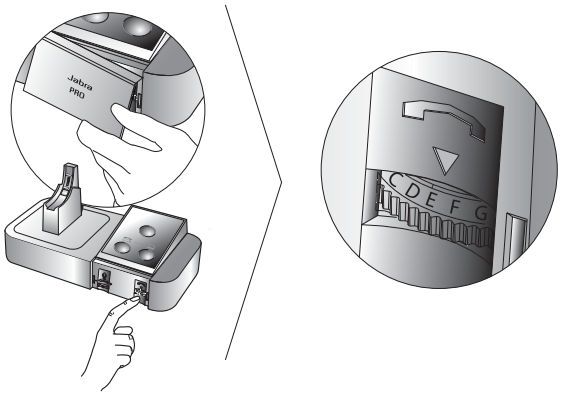
3. CONFIGURING

3.1 CONFIGURING FOR DESK PHONES

Before first-time use of the Jabra PRO 9450 with a desk phone, a clear dial tone and microphone volume must be determined for optimal sound quality. Both features are manually adjusted on the base.

Set a Clear Dial Tone

1. Remove the front panel of the Jabra PRO 9450 base, as illustrated.
2. Put on the headset. The desk phone icon will change to ☎. If the icon does not change, tap the desk phone button on the base keypad.
3. Lift the desk phone handset and set aside, or press the headset button on the desk phone.
4. Rotate the clear dial tone switch from A to G, as illustrated, and listen in the headset for a clear dial tone.

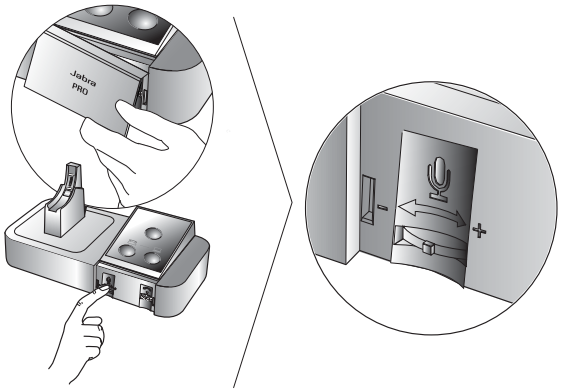


5. Determine the best switch position. The dial tone should be strong, clear and undistorted.
6. Return the desk phone handset to the receiver, or press the headset button on the desk phone.
7. When finished, return the front panel to the base.

Changes made to the clear dial tone only apply to desk phones.

Set the Microphone Volume

1. Ensure the headset is docked, and then press and hold the desk phone button on the base keypad until the desk phone icon changes to ☎.
2. Remove the front panel of the Jabra PRO 9450 base, as illustrated.
3. Put on the headset. The desk phone icon will change to ☎. If the icon does not change, tap the desk phone button on the base keypad.



4. Get a dial tone by pressing the headset button on the desk phone, or by lifting the desk phone handset.
5. **Make a test call**. Dial a friend or colleagues phone number using the desk phone.
6. If your speaking volume is too quiet or too loud, adjust the microphone volume on the base, as illustrated. Ensure the listener does not adjust their own volume.
7. When finished, end the call and return the front panel of the Jabra PRO 9450.

Changes made to the microphone volume switch only apply to desk phones.

3.2 CONFIGURING FOR SOFTPHONES

1. Install Jabra PC Suite using the supplied installation CD. Refer to the Jabra PC Suite section of this manual for further information.
2. Launch softphone software, and set the Jabra PRO 9450 as speaker and microphone in the audio configuration. Refer to specific softphone documentation for assistance in setting audio configurations.

For the latest list of supported softphones, please visit the Jabra website at www.jabra.com/pcsuite.

3.3 LIMITED CONFIGURATION USING THE BASE

It is highly recommended to use the Jabra Control Center for all configuration changes. However, there are five settings that can be configured using the base.

- EHS/RHL mode.
- IntelliTone level.
- Maximum DECT wireless range.
- Desk phone bandwidth.
- Softphone bandwidth.

Change Settings using the Base

1. Ensure there are no active calls.
2. Remove the front panel of the Jabra PRO 9450 base.
3. Center-press the microphone volume switch on the base to enter setup mode. The mute indicator will blink slowly to indicate setup mode.
4. Tap the desk phone button on the keypad to cycle through the settings. The first setting is EHS/RHL mode. The current setting is indicated by the desk phone icon.
5. Tap the softphone button on the keypad to cycle through the values for each setting. The current value is indicated by the softphone icon.
6. When finished, center-press the microphone volume switch to save settings and exit setup mode. The base will restart.

	Setting		Value
	Desk phone EHS/RHL mode		Auto Detect (default)
			Jabra GN1000/RHL/None
			Jabra IQ EHS
			Cisco
			DHSG
			MSH
	IntelliTone level		Level 0 (default)
			Level 1
			Level 2
			Level 3
			Level 4
	Maximum DECT wireless range		Normal (default)
			Low
			Very low
	Bandwidth mode for desk phone		Narrowband (default)
			Wideband
	Bandwidth mode for softphone		Narrowband
			Wideband (default)
	Softphone type		Microsoft (default)
			Cisco, Avaya, Siemens, IBM, Aastra, Skype
			Other
			None (PC Audio)

4. JABRA PC SUITE

Jabra PC Suite is a collection of software designed to support the Jabra PRO 9450. For optimal functionality and management of the Jabra PRO 9450, it is highly recommended to install Jabra PC Suite.

Jabra PC Suite consists of:

PC Call Manager

Enables call management via the PC, and indicates status of the Jabra PRO 9450.

Jabra Control Center

Settings management and monitoring of the Jabra PRO 9450.

Jabra Device Service

Manages the interaction between the Jabra PRO 9450 and Jabra Control Center, PC Call Manager, and softphone drivers.

Jabra Firmware Updater

Updates Jabra PRO 9450 firmware.

Online Help

Jabra PC Suite and Call Manager help section.

Jabra PC Suite additionally includes drivers for various softphones. For a list of supported softphones, visit www.jabra.com/pcsuite.

4.1 INSTALL JABRA PC SUITE

To install Jabra PC Suite, launch the Jabra PC Suite setup file on the installation CD, or download the latest version from the Jabra website at www.jabra.com/pcsuite.

4.2 FIRMWARE UPDATES

Firmware updates improve performance or add new functionality to your Jabra PRO 9450.

Update Firmware

- Launch the Jabra Firmware Updater installed with Jabra PC Suite, and follow the Firmware Updater wizard, or
- Check for the latest version via Jabra Control Center > Help > Check for Updates.

4.3 MASS DEPLOYMENT

Jabra PRO 9450 configurations can be saved and loaded onto multiple other Jabra PRO 9450s using Jabra Control Center.

Save/Load Configurations

1. Launch Jabra Control Center, and select ´File´ in the main toolbar.
2. Click ´Save Configuration...´ to save the current settings to a file on the PC.
3. Click ´Load Configuration...´ and browse to load a saved configuration, and load it onto other Jabra PRO 9450s.

5. JABRA PRO 9450 FEATURES

The Jabra PRO 9450 has seven main features for easy call management.

Headset features	Base features
Multi-function button	Keypad
Touch panel	Keypad visual indicators
LED indicator	Audio indicators
Audio indicators	

5.1 HEADSET MULTI-FUNCTION BUTTON

The multi-function button is located on the top of the headset, and manages calls on the target phone. You can answer calls, end calls, switch between held calls, and more, using a combination of taps, double-taps or presses.

Phone idle

Function	Tap	Double-Tap	Press (hold 1-3 secs)
Answer incoming call	✓		
Get a dial tone on target phone	✓		
Reject incoming call		✓	
Call last number dialed (supported softphones only)		✓	
Switch between target phone			✓
Power headset on	✓		
Power headset off			✓ (5 secs)

Phone on call(s)

Function	Tap	Press (hold 1-3 secs)
End current call	✓	
Put current call on hold, and accept incoming call		✓
End merged calls	✓	

5.2 HEADSET TOUCH PANEL

The touch panel is a touch-sensitive panel located on the microphone arm of the headset. The touch panel controls the headset speaker volume and microphone mute/un-mute.

Changes made to the speaker volume apply independently to desk phone or softphone.

Increase speaker volume	Decrease speaker volume	Mute/un-mute microphone
Slide finger up the touch panel (away from mouth)	Slide finger down the touch panel (toward the mouth)	Double-tap

5.3 HEADSET LED INDICATOR

The multi-colored LED indicator is located on the arm of the headset, and indicates headset status. For a complete list of headset LED indicator samples, please refer to the Technical Specifications section (p. 33) of this manual.

5.4 HEADSET AUDIO INDICATORS

The headset plays a variety of audio tones to indicate events. For a complete list of playable audio indicator samples, please refer to the Technical Specifications section (p. 34) of this manual.

Critical Headset Audio Indicators

Low battery warning

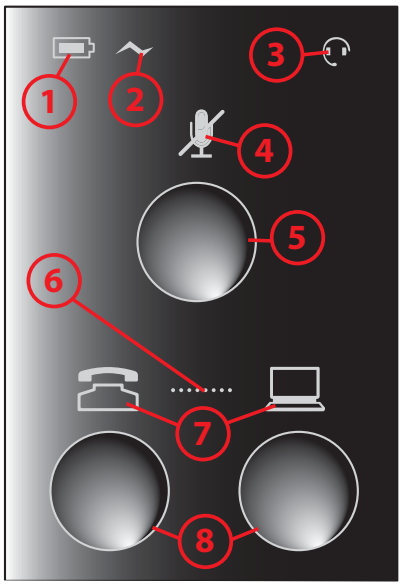
If the headset battery is low, two very quick low tones will repeat occasionally to indicate the headset battery should be charged immediately. Dock the headset to charge the headset battery.

Out of range warning

If the headset moves out of range of the base, three quick descending tones will repeat every fifteen seconds, until the headset is moved back into range of the base.

5.5 BASE KEYPAD

The Jabra PRO 9450 base keypad displays information about the headset and call status, and has controls for call handling. From here, you can change target phone, answer an incoming call, end the current call, configure base settings, or open an audio link to the current target phone.



1. **Battery icon:** indicates the current battery level.
2. **Headset docking icon:** indicates the headset is docked.
3. **Audio link icon:** indicates audio link between base and headset is active.
4. **Mute icon:** indicates the headset microphone is muted.
5. **Mute button:** mutes/un-mutes the headset microphone.
6. **Group call icon:** indicates desk phone and softphone calls are merged.
7. **Phone state icon:** indicates desk phone or softphone call states.
8. **Phone buttons:** used for desk phone and/or softphone call handling.

5.6 BASE KEYPAD VISUAL INDICATORS

Icon	Event
	Battery charging
	Full battery
	Low battery
	Very low battery
	Headset docked
	Unknown headset docked
	Headset and base pairing
	Muted

Icon	Event
	Current target phone
	Phone ringing
	Phone on call
	Phone on hold
	Phone unplugged
	Group call
	Audio link between headset and base is active
	Unable to connect to headset

5.7 BASE AUDIO INDICATORS

The base speaker is located on the bottom of the base, and plays two distinct sounds.

Incoming Call Ringtone

Adjust the incoming call ringtone volume using the Jabra Control Center.

1. Launch Jabra Control Center, and select either ´Desk phone´ or ´Softphone´ tab.
2. Adjust the ´Base speaker ring tone level´ slider to the desired setting, and click ´Apply´.

Keypad Button Clicks

Tapping, double-tapping or pressing the keypad buttons will play a click sound. Adjust keypad button volume via the Jabra Control Center. The default setting is ´off´.

1. Launch Jabra Control Center, and select either ´Desk phone´ or ´Softphone´ tab.
2. Select one of four preset keypad click settings (*off, low, medium*, or *high*), and click ´Apply´.

6. BASIC CALL MANAGEMENT

6.1 DESK PHONE: MAKING CALLS, ANSWERING CALLS, AND ENDING CALLS

	Phone with electronic hookswitch, or handset lifter	Phone without electronic hookswitch, or handset lifter
	If necessary, set the desk phone as the target phone, by pressing and holding the desk phone button on the base until the desk phone icon changes to white.	
Make call	1. Lift headset from docking cradle, or tap the multi-function button, or tap the desk phone button on the base. 2. Dial number using desk phone.	1. Lift headset from docking cradle, or tap the multi-function button, or tap the desk phone button on the base. 2. Lift desk phone handset and set aside. 3. Dial number using desk phone.
Answer call	Lift headset from docking cradle, or tap the multi-function button, or tap the desk phone button on the base.	1. Lift headset from docking cradle, or tap the multi-function button, or tap the desk phone button on the base. 2. Lift desk phone handset and set aside.
End call	Dock the headset, or tap the multi-function button, or tap the desk phone on the base.	1. Dock the headset, or tap the multi-function button, or tap the desk phone on the base. 2. Return desk phone handset to receiver.

6.2 SOFTPHONE: MAKING CALLS, ANSWERING CALLS, AND ENDING CALLS

	Supported softphone
Make call	Dial number using supported softphone software. The base will automatically switch to softphone.*
Answer call	Lift headset from docking cradle, or tap the multi-function button, or tap the soft-phone button on the base.
End call	Dock headset, or tap the multi-function button, or tap the softphone button on the base.

** If softphone is unsupported, the headset and softphone can be linked by double-tapping the softphone button on the base keypad. For further assistance please refer to Online Help.*

6.3 SWITCHING BETWEEN DESK PHONE AND HEADSET

Whilst on a phone call, it is possible to switch between a phone and a headset without interrupting the call.

Desk Phones

Switch from desk phone to headset

1. If necessary, press the desk phone button on the base, to set desk phone as target phone.
2. Lift headset from docking cradle.
3. Do not return desk phone handset to receiver, as this will hang up the call.

Switch from handset to desk phone (without electronic hookswitch or handset lifter)

1. Lift desk phone handset.
2. Dock headset, or tap the multi-function button, or tap the desk phone button on the base.

Switch from handset to desk phone (with electronic hookswitch or handset lifter)

1. Lift desk phone handset.
2. Refer to specific desk phone documentation. In some cases a button must be pressed on the desk phone, while in others it will be automatic.

PC

For softphones, the headset is likely to be the only option; however you can change to other audio devices connected to the PC, via audio preferences in Windows and/or the softphone software.

6.4 LAST NUMBER REDIAL (SOFTPHONE ONLY)

The Jabra PRO 9450 can redial the last number dialed (supported softphones only). Check specific softphone documentation for last number redial compatibility.

Last Number Redial

1. If necessary, press the softphone button on the base to set softphone as target phone.
2. Double-tap the headset multi-function button to redial the last number called.

7. ADVANCED CALL MANAGEMENT

7.1 CALL WAITING

Call waiting allows a current softphone call to be placed on hold, and an incoming softphone call to be answered (supported softphones only). Check specific softphone documentation for call waiting compatibility.

Call waiting can be managed on the headset or the base.

	HEADSET **Multi-function button**	**BASE** **Softphone keypad button**
Accept incoming call, and put current call on hold	Press (1-2 secs)	Press (1-2 secs)
Accept incoming call, and end current call	Tap	Tap
Reject incoming call, and remain on current call	Double-tap	Double-tap
Switch between current call, and call on hold	Press (1-2 secs)	Press (1-2 secs)

7.2 CALL COLLISION

Call collision occurs when there is a current call on one phone, and an incoming call on another phone. (Example: you have a current call on a softphone, and an incoming call on a desk phone connected to the same base).

Call collision can be managed on the headset or the base.

	HEADSET **Multi-function button**	**BASE** **Keypad phone buttons**
Accept incoming call, and put current call on hold	Press (1-2 secs)	Tap incoming call´s phone button
Accept incoming call, and end current call	Tap	Tap current call´s phone button, then tap incoming call´s phone button
Reject incoming call, and remain on current call	Double-tap	Double-tap incoming call´s phone button

To switch between calls on hold, press the multi-function button, or tap the held call phone button on the base keypad.

7.3 MERGING CALLS

Calls on a desk phone and softphone can be merged to create a group call. There are two methods for creating a group call: merging an outgoing call with a current call, or merging an incoming call with a current call. Both methods of merging calls are detailed below:

Merge an Outgoing Call with a Current Call

Desk phone	**Softphone**
1. While on a desk phone call, dial a new number using the softphone. The desk phone call will be placed on hold. 2. Simultaneously press and hold the desk phone and softphone buttons on the base for 1-3 seconds to merge the calls. When calls are merged, the group call indicator will change to green.	1. While on softphone call, tap the desk phone button on the base. The softphone call will be placed on hold. 2. Dial a new number using the desk phone. 3. Simultaneously press and hold the desk phone and softphone buttons on the base for 1-3 seconds to merge the calls. When calls are merged, the group call indicator will change to green.

Merge an Incoming Call with a Current Call

Desk phone	Softphone
1. While on a desk phone call, tap the softphone button to accept the incoming call. The desk phone call will be placed on hold. 2. Simultaneously press and hold the desk phone and softphone buttons on the base for 1-3 seconds to merge the calls. When calls are merged, the group call indicator will change to green.	1. While on softphone call, tap the desk phone button to accept the incoming call. The softphone call will be placed on hold. 2. Simultaneously press and hold the desk phone and softphone buttons on the base for 1-3 seconds to merge the calls. When calls are merged, the group call indicator will change to green.

Unmerge/re-merge Calls

To unmerge or re-merge calls, simultaneously press and hold the desk phone and softphone buttons on the base keypad for 1-3 seconds.

End Group Call

To end a selected call in the group call, tap the relevant desk phone or softphone button on the base keypad. The group call will be ended for that participant.

To end the group call for all participants, dock the headset or tap the multi-function button.

7.4 CONFERENCE CALL WITH MULTIPLE HEADSETS

The Jabra PRO 9450 enables up to three additional Jabra PRO headsets to be connected to the base for conferencing. When two or more additional headsets are connected to the base, the audio is filtered from wideband to narrowband.

Connect Additional Headset(s)

1. While the primary headset is undocked and on a call, dock a secondary headset with the base hosting the call. Pairing will take a few seconds, during which the docking indicator will blink yellow. When the headsets are successfully paired, a double-tone will sound in the primary headset.
2. Tap the multi-function button on the primary headset to accept the secondary headset. The audio is now shared between headsets.
3. Repeat the procedure to connect additional headsets, as required.

Ending or Leaving the Conference

The primary headset user can end the conference by hanging up the call. The call is ended for all headsets.

Guests can leave the conference by tapping the multi-function button on their headset, or by docking the headset with the base. The conference call is still active for all other headsets.

7.5 AUTOMATIC DISCONNECT PREVENTION (UNSUPPORTED SOFTPHONES)

When on a call using an unsupported softphone, any incoming calls on a desk phone will automatically disconnect the softphone call. To prevent disconnection, double-tap the softphone button on the base keypad before making the softphone call.

7.6 RECORDING DESK PHONE CALLS

Desk phone calls can be recorded on a PC using third-party software, such as Windows Sound Recorder. To record a desk phone call, call recording must be enabled in Jabra Control Center.

Enable Call Recording

1. Launch Jabra Control Center, and select the ´Audio´ tab.
2. Tick ´Forward desk phone call to PC for recording´, and click ´Apply´.

Desk phone calls can now be recorded using any third-party software on a PC.

NOTE: Recording conversations in secrecy may be illegal. Never record conversations without first obtaining permission.

8. ADVANCED JABRA PRO 9450 FEATURES

8.1 SAFETONE™ HEARING PROTECTION

SafeTone™ provides effective hearing protection against potential risks, such as acoustic shock and noise exposure. SafeTone™ consists of two components, PeakStop™ and IntelliTone™.

PeakStop™ Acoustic Shock Protection

PeakStop™ automatically suppresses sounds over 118dB(A), protecting hearing from acoustic shock. PeakStop™ is only available from Jabra.

IntelliTone™ Noise-Exposure Protection

IntelliTone™ offers four levels of protection against acoustic shock and noise-exposure. IntelliTone™ settings can be changed via the Jabra Control Center, under the ´Audio´ tab. IntelliTone™ is only available from Jabra.

Protection level	Criteria
Level 0 (default)	Basic protection (over 118dB(A))
Level 1*	Less than 4 hours on phone/day
Level 2*	4-8 hours on phone/day
Level 3*	More than 8 hours on phone/day
Level 4 (TT4)	Recommended Australian protection level (Telstra)

*Compliant with Directive 2003/10/EC of the European Parliament and Council of 6 February 2003.

8.2 WIRELESS RANGE

The Jabra PRO 9450 supports a maximum wireless range of up to 150 meters. Physical obstructions and electromagnetic interference may shorten this range.

Headset sound quality may slowly deteriorate the further the headset is away from the base, and may improve the closer the headset is to the base. When the headset is completely out of range, a unique tone (three quick descending notes) will be played in the headset every few seconds.

If the headset is on a call when moved out of range, the audio will be lost; however the call will remain active at the base for 120 seconds. To restore audio to the call, move the headset back in range of the base.

If the headset remains out of range of the base for more than an hour, the headset will power down to conserve battery.

8.3 HEADSET DENSITY LIMITS

Using multiple Jabra PRO headsets in one area may have an effect on headset performance and sound quality. The recommended limit for the number of headsets in one area before call connections may be lost will depend on EU or US DECT. The Jabra PRO 9450 uses US DECT, if purchased in the US, and EU DECT for the rest of the world.

Headset Recommended Limits

	Narrowband	Wideband
EU DECT	80 headsets	40 headsets
US DECT	45 headsets	22 headsets

Base-to-base Distances

The distance required between bases for optimal headset performance and sound quality will depend upon the headset density limit, and EU or US DECT.

Below density limit (EU and US DECT)	Above density limit (EU DECT)	Above density limit (US DECT)
2-4 meters	5-7 meters	7-10 meters

8.4 WIDEBAND AUDIO

The Jabra PRO 9450 supports both wideband and narrowband audio. Wideband audio offers better sound quality at a reduced battery time.

Narrowband is default-enabled for desk phones. Wideband is default-enabled for softphones.

Change Wideband Audio Settings

1. Launch Jabra Control Center, and select the ´Audio´ tab.
2. Tick the relevant checkbox under ´Enable wideband audio for´, and then click Apply.

8.5 VOICE OR MUSICAL TONE

Choose to hear an English voice or a musical tone to indicate switching between a desk phone and softphone.

Select Voice/Tone Setting

1. Launch Jabra Control Center, and select the ´Headset´ tab.
2. Tick the relevant setting under ´Target change indication´, and then click Apply.

8.6 SOUND SETTINGS

Choose between three equalizer presets available for all sounds: Treble, Normal (default) and Bass.

Select Tone Settings

1. Launch Jabra Control Center, and select the ´Audio´ tab.
2. Tick the relevant setting under ´Tone setting´, and then click Apply.

8.7 AUTOMATIC PC AUDIO DETECTION

The Jabra PRO 9450 can be configured to automatically open an audio link between headset and PC when sound is detected on the PC. Automatic PC audio detection is default-enabled.

Enable/Disable PC Audio Detection

1. Launch Jabra Control Center, and select the ´Audio´ tab.
2. Select the relevant setting under ´PC audio control´, and then click Apply.

8.8 LISTENING TO MUSIC

To listen to music played on a PC, an audio link between the Jabra PRO 9450 base and the PC must be opened. When an audio link is opened and no calls are active, any music or sounds played on the PC (including music from a media player) will play in the headset.

Open/Close an Audio link between Base and PC

1. Launch Jabra Control Center.
2. Click the ´open/close audio link´ button in the top toolbar.

Alternatively, right-click the Jabra icon in Windows taskbar, and select ´Open Audio Link´ or ´Close Audio Link´.

8.9 THEFT PROTECTION

The base includes a Kensington Security Slot for attaching a security cable. To secure the base to your desk, purchase any safety cable usable with the Kensington Security Slot and follow the instructions included with the cable.

9. SUPPORT

9.1 FAQS AND TROUBLESHOOTING

Q The desk phone/softphone state icon is grayed out on the base keypad. What does this mean?

A The phone is not the current target, or the phone is unplugged.

Q How do I pair my headset with the Jabra PRO 9450 base?

A Dock the headset with the base to initiate pairing. Pairing will occur automatically, unless the base can establish a link with a primary headset.

Q Is it possible to dock my headset on another base from the Jabra PRO 9400 series?

A Yes. The headset can be docked with any Jabra PRO 9400 series base.

Q Can I pair my headset directly with a third-party DECT phone?

A No. The headset can only be paired with a Jabra PRO 9400 series base.

Q Why doesn't my computer detect the Jabra PRO 9450 base?

A Try connecting the base to another USB port on the PC. It is recommended to have a direct connection between the base and USB port (without a USB hub).

Q Why doesn't my headset work with my desk phone/softphone?

A Check the following:

- Ensure the headset battery is charged. The keypad battery icon will be green when charging, or yellow when charged.
- Ensure the headset is in range of the base. Up to 150 meters, depending on environment.
- Ensure the headset and base are paired. Dock the headset to initiate pairing.

Q Why does nothing happen when I try to use my desk phone?

A Check the following:

- Ensure the base is powered on.
- Ensure desk phone is the current target. The keypad desk phone icon will be white.
- Ensure there is an audio connection between desk phone and base.
  Tap the keypad desk phone button to establish an audio connection.
- Ensure there is a dial tone. Lift the desk phone handset, or press the headset button on the desk phone, to get a dial tone.
- Re-run the desk phone section of the Interactive Setup Wizard.

Q Why do I hear a low noise in the headset when there is silence at the other end?

A The headset speaker volume might be too high. To decrease the volume, slide your finger down the headset touch panel.

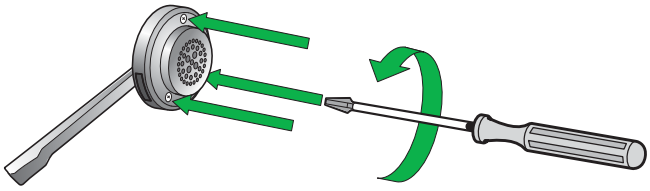
Q How come the person on the other end cannot hear me when I am talking using my desk phone?

A The clear dial tone or microphone volume settings might be incorrectly set. Re-run the desk phone section of the Interactive Setup Wizard, or read Section 3 of this manual.

Q How do I replace the headset battery?

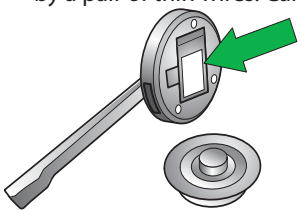
A To replace the headset battery:

1. Order a Jabra PRO battery replacement kit (contact your Jabra supplier, or visit www.jabra.com).
2. Detach the wearing-style attachment from the headset.
3. Use the screwdriver supplied with the battery replacement kit to remove the three screws on the back of the headset.

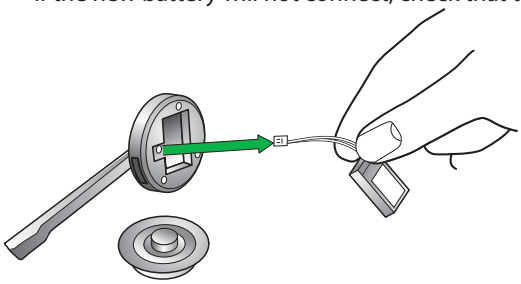


4. Remove the speaker plate to expose the battery.

5. Gently pry the battery up and out of the headset. The battery will remain attached to the headset by a pair of thin wires. Carefully disconnect the wires from the headset, and dispose of the old battery.



6. Align the wire connector of the new battery with the socket inside the headset, and press firmly into place. If the new battery will not connect, check that the connector is not upside-down.



7. Fold the wires into the wire groove, and press the battery into place. Ensure the battery´s label faces outwards.
8. Screw the speaker plate back onto the headset.

Q Why am I getting a buzzing sound in my headset?

A Assuming the device has been set up correctly, the phone may not be fully immune to the radio signals the headset uses. To overcome this problem, move the headset base at least 30 cm away from the phone. Alternatively, reduce the wireless range of your unit.

Q Why can't I hear sound or listen to music from my PC in my headset?

A Check the following

- Ensure the Jabra PRO 9450 is set as the current audio device in the Windows sound control panel, and in your softphone software.
- Ensure the audio link to your PC is active. Right-click the Jabra Device icon in the Windows taskbar, and select Open Audio Link.

Q When I try to make a call on my desk phone, the Jabra GN1000 RHL lifts, but the call is not connected.

A Ensure the base is connected to the desk phone handset port, and not the desk phone headset port. The Jabra GN1000 cannot be used in conjunction with a headset port.

Q Is it possible to automate calling and answering on my desk phone without using a handset lifter?

A Yes, if the desk phone has an electronic hook switch feature. Check your supplier for compatibility with your phone, and/or consult the support area at www.jabra.com.

Q Is it possible to set up an automatic dial tone for my softphone when I undock my headset?

A Yes, the Jabra PRO 9450 can be configured to automatically get a dial tone on the target desk phone or softphone when the headset is undocked. Automatic dial tones are configured independently for desk phones and softphones. Desk phones are default-enabled, and softphones are default-disabled.

1. Launch Jabra Control Center, and select the ´Desk phone´ tab.
2. Select/deselect the ´Open link when headset is undocked´ setting, and then click Apply.

Q Why does my desk phone's electronic hookswitch not work with my headset?

A Please check your specific desk phone documentation for compatibility and configuration settings. Alternatively visit www.jabra.com/PRO9400

Q Is it possible to listen in on calls with the Jabra PRO 9450?

A The risk of unauthorized access is limited. The Jabra PRO 9450 uses 64-bit encryption.

Q What is the range on the Jabra PRO 9450?

A Jabra PRO 9450 supports a maximum range of up to 150m (base to headset). Range varies according to the environment in which the headset is used.

Q Can I make a conference call using multiple headsets?

A Yes, the Jabra PRO base is able to pair with four headsets in total: one primary and three secondary headsets.

Q Can I turn the headset off to save power when I'm away from the base?

A Yes. Press and hold the headset multi-function button for five seconds to power the headset off. To power the headset up again, dock the headset with the base, or press the multi-function button.

Q What is the talk time for a Jabra PRO 9450 headset?

A Approximately 8 hours for wideband talk, and approximately 10 hours for narrowband talk.

Q My headband/earhook/neckband is broken. How do I purchase another one?

A Contact your local Jabra supplier. The necessary part number can be found in the optional accessories section of this manual.

9.2 GETTING ASSISTANCE

If you have any problems with the Jabra PRO 9450 not addressed in this manual, please contact Jabra technical support at any of the locations listed below.

WEB

www.jabra.com

EUROPE

	Phone:	E-mail:
Belgique/Belgium	+ 49 (0)8031 2651 72	techsupport@gn.com
Czech Republic	+ 420 800 522 722	support.cz@gn.com
Danmark	*Kontakt venligst din nærmeste forhandler via www.jabra.dk/forhandler*	
Deutschland	+ 49 (0)8031 2651 72	techsupport@gn.com
España	+ 34 916 398 064	pedidos@gn.com
France	+ 33 (0) 130 589 075	techsupport@gnnetcom.fr
Italia	+ 39 02 5832 8253	ordini@gn.com
Luxembourg	+ 49 (0)8031 2651 72	techsupport@gn.com
Nederland	+ 49 (0)8031 2651 72	techsupport@gn.com
Norge	+ 47 32 22 74 70	support.no@gn.com
Österreich	+ 49 (0)8031 2651 72	techsupport@gn.com
Poland	+ 48 12 254 40 15 0 801 800 550	support.pl@jabra.com
Russia		techsupport.ru@jabra.com
Suomi	+ 358 204 85 6040	support.fi@gn.com
Sverige	+ 46 (0)8 693 09 00	info@jabra.se
United Kingdom	+ 44 (0)1784 220 172	info_uk@jabra.com

USA AND CANADA

Technical support: techsupport@gnnetcom.com

Information: info@jabra.com

Phone (toll-free in USA and Canada):

Canada	1-800-489-4199
USA	1-800-826-4656

ASIA/PACIFIC

Information: support.apac@jabra.com

Phone**:**

Australia	1-800-636-086 (local distributor)
China	+ 86-21-5836 5067
Hong Kong	800-968-265 (Toll-free)
India	000-800-852-1185 (Toll-free)
Indonesia	001-803-852-7664
Japan	+ 81-3-5297-7976
Malaysia	1800-812-160 (Toll-free)
New Zealand	0800-447-982 (Toll-free)
Philippine	+ 63-2-2424806
Singapore	800-860-0019 (Toll-free)
Taiwan	0080-186-3013 (Toll-free)

MIDDLE EAST/AFRICA

E-mail: support.mea@gn.com

10. TECHNICAL SPECIFICATIONS

10.1 JABRA PRO HEADSET

Operating Environment:
-10˚C to +55˚C (0˚C to +40˚C when charging); Up to 95% RH non condensing.

Call Control:
Multi-function button support for answer call, end call, reject call, redial, swap held calls; docking operations can also answer and end calls.

Volume Control and Microphone Mute:
Controlled via touch panel on headset.

Visual Indicator:
Multi-colored LED indicates call status, battery level, pairing status and other events.

Audio Indicators:
Tones indicate incoming calls, low battery, volume level, microphone muting and other events; target phone can be indicated by English voice tag or target-specific melody.

Sound Quality:
DSP noise reduction; echo cancellation; tone control; narrowband and wideband audio (selectable per phone type).

Firmware Update:
Updateable via USB interface when docked in the Jabra PRO base.

Recharge:
While docked in the Jabra PRO base.

PC-based Configuration:
All settings can be stored and loaded from a PC for backup and mass deployment.

Wireless Standard:
(CAT - iq) European DECT and U.S. DECT.

DECT Range:
For European DECT; up to 150 meters from Jabra PRO base to headset.
For U.S. DECT; up to 135 meters from Jabra PRO base to headset.

DECT Frequencies:
US DECT: 1.92 - 1.93 GHz.
EU DECT: 1.88 - 1.90 GHz.

Wearing-styles:
Earhook or headband (neckband is available as an accessory).

Microphone Boom Arm Style:
Midi.

Speaker(s):
Wideband speaker.

Microphone:
Noise-cancelling microphone.

10.2 HEADSET BATTERY

Battery Type:
Lithium Ion.

Battery Capacity:
315 mA/h, typical.

Battery Talk Time:
Up to 10 hours.

Battery Lifetime:
Minimum 500 charge cycles (over 3 years when used for 8 hours a day).

Battery Standby Time:
At least 100 hours.

Operating Temperature Range:
-10˚C to +60˚C.
Note: The headset features a temperature-dependant charging algorithm that prevents the battery from being charged during extreme temperatures (about 0˚ to 45˚C).

Battery Charge Time:
2 hours.

Shelf Life:
Holds a charge for at least 6 months in the off state before recharge is required.

Replacement:
Battery lifetime is approximately 3 years with regular use. Contact your Jabra dealer for details on how to order a battery-replacement kit for your headset.

10.3 HEADSET LED INDICATOR

Headset state	LED (battery full)	LED (battery low)
Idle	▶○○○○	▶○○○○
Not connected	▶○○○○	▶○○○○
Out of range	▶○○○○	▶○○○○
Call active	▶○○○○	▶○○○○
Ringing	▶○○○○	▶○○○○
Power on	▶○○○○	▶○○○○
Power off	▶○○○○	▶○○○○
Pairing	▶○○○○	▶○○○○
Pairing succeeded	▶○○○○	▶○○○○
Charging	▶○○○○	

10.4 HEADSET AUDIO INDICATORS

Sample (click to play)	Action
▶	Power on
▶	Power off
▶	Button tap
▶	Button double-tap
▶	Button press
▶	Maximum speaker volume reached
▶	Minimum speaker volume reached
▶	Microphone muted
▶	Incoming call on desk phone
▶	Incoming call on softphone
▶	Incoming call on different phone, while on a call (call collision)
▶	Target changed to desk phone
▶	Target changed to softphone
▶	Call ended
▶	Battery low
▶	Conference start
▶	Conference end
▶	Out of range

10.5 MATERIALS AND ALLERGIES

The headband attachment is made of stainless steel and does not have a nickel-coated surface. Nickel release from the headband is 0.02 µg/cm2/week, which is below the 0.50 µg/cm2/week limit established by EU Directive 94/27/EF. The stainless steel alloy was tested for nickel release in accordance with the European standard EN 1811:1998.

Other wearing-style attachments are made of plastic and contain no known allergens. The ear cushions do not contain vinyl. The products contain no nickel, chrome or natural rubber that can come into contact with users' skin.

10.6 JABRA PRO BASE

The Jabra PRO 9450 base meets the following specifications.

Dimensions:
160mm x 94mm x 82mm.

Wireless Standard:
(CAT - iq) European DECT and U.S. DECT.

DECT Range:
For European DECT; up to 150 meters from Jabra PRO base to headset.
For US DECT 6.0; up to 135 meters from Jabra PRO base to headset.

Operating Environment:
-10˚C to +55˚C (0˚C to +40˚C when charging); Up to 95% RH non condensing.

Keypad Functions:
Call handling, partial system configuration.

Recharge Cradle:
Fits supplied Jabra PRO headset; features magnetic coupling; easily replaced to accommodate future headset upgrades.

Audio:
Built-in speaker provides ring tones and/or audio feedback for keypad operation.

Audio Bandwidth:
Narrowband or wideband.

Desk Phone Connections:
RJ-11 for handset, RJ-11 for phone body (or headset port), RJ-45 for AUX (for electronic hookswitch or Jabra GN1000 handset lifter).

Clear Dial Tone Switch and Microphone Volume Switch:
Electromechnical switches. Clear dial tone switch set manually using Interactive Setup Wizard. Microphone volume level determined and set automatically by Interactive Setup Wizard.

Electronic-hookswitch Standards:
Jabra GN1000, Jabra IQ EHS, Cisco, DHSG and MSH. Each requires additional cabling and/or equipment available separately; more may become available in future and added via firmware upgrade. Jabra GN1000 is supported by default and requires no additional configuration.

Busy Light Indicator:
2.5mm jack connector (available as an accessory).

PC Connector:
Micro USB.

Firmware Update:
Downloadable from PC.

PC-based Configuration:
All settings can be stored and loaded from a PC for backup and mass deployment.
Softphone Support:
Full call handling for Skype, Microsoft Office Communicator and Cisco IP Communicator; for other softphones see headset as a standard sound card; support for additional softphones may be added via driver updates for the PC. For the latest updates, see jabra.com/pcsuite on the web.

Theft Protection:
Kensington Security Slot standard.

10.7 PRODUCT DISPOSAL

Please dispose of the headset according to local regulations and recycle when possible. Do not dispose as household waste. Do not dispose of the headset in a fire as the battery may explode. Batteries may also explode if damaged.

10.8 CERTIFICATIONS AND SAFETY APPROVALS

CE

This product is CE marked according to the provisions of the R & TTE Directive (99/5/EC). Hereby, GN declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For further information, please consult http://www.jabra.com.

Within the EU, this device is intended for use in Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, The Netherlands, United Kingdom, and within EFTA in Iceland, Norway and Switzerland.

FCC

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.

Users are not permitted to make changes or modify the device in any way. Changes or modifications not expressly approved by Jabra will void the user's authority to operate the equipment.

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 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.

The user must place the base 8" (20 cm) or more from any personnel in order to comply with FCC RF exposure requirements.

Industry Canada

Operation is subject to the following two conditions: (1) This device may not cause interference and (2) This device must accept any interference, including interference that may cause undesired operation of the device. The term "IC:" before the certification/registration number only signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Patents and design registration pending international

11. GLOSSARY

DECT

(Digital Enhanced Cordless Telecommunications). DECT is an ETSI standard for digital portable phones (cordless home telephones), commonly used for domestic or corporate purposes.

Firmware

The software that is embedded in a hardware device, for example any Jabra headset or base.

Hookswitch

The control mechanism that answers and hangs up a call on a telephone. When you place the handset in the telephone cradle, it depresses the switch hook's button and hangs up (puts the phone "on hook").

Jabra PC Suite

A collection of PC software that enables the configuration of the Jabra PRO 9450. The Jabra PC Suite also includes drivers for various softphones on the market.

Multi-function Button

This button is located on the top of the headset. It is used for call handling on the target phone. Using taps, double-taps and presses, you can answer calls, end calls, switch between held calls, and more.

Narrowband Audio

Narrowband can also be used with the audio spectrum to describe sounds which occupy a narrow range of frequencies. In telephony, narrowband is usually considered to cover frequencies 300–3400 Hz. A narrowband channel occupies less space in the radio spectrum than a wideband channel.

Pairing

Creates a unique and encrypted link between a DECT base and a DECT headset and enables them to communicate with each other. DECT devices will not communicate if they have not been paired.

Softphone

A piece of software for making telephone calls over the Internet using a PC, rather than using dedicated hardware. Often a softphone is designed to behave like a traditional telephone, sometimes appearing as an image of a phone, with a display panel and buttons with which the user can interact.
A softphone is usually used with a headset connected to the sound card of the PC, or with a USB headset.

Softphone Driver

Establishes a control link between a softphone and your Jabra headset, so you can answer and end, mute and un-mute, and hold and resume calls using the buttons on your headset. The actual call control functions available for the headset depend on the capabilities of the softphone and the Jabra headset model.

Wideband Audio

Sometimes also called HD Audio, this is an audio technology used in telephony. It extends the frequency range of sound travelling over telephone lines, resulting in higher quality voice transmission. The human ear can detect ranges from 80 hertz to 14,000 hertz. Traditional, or narrowband telephone calls, limit audio frequencies to the range of 300 to 3400 hertz. Wideband audio eliminates the majority of bandwidth limitations and transmits in the range of 30 hertz to 7000 hertz or higher.

Dispose of the product according to local standards and regulations.
www.jabra.com/weee

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