

Part No. N0009103 2.0

Business Communications Manager

Nortel Networks WLAN Handset 2210/2211 User Guide



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Getting started

The Nortel Networks WLAN Handset 2210 and the Nortel Networks WLAN Handset 2211 for Business Communications Manager (BCM) are fully functional wireless handsets specifically designed for the busy office environment.

In this User Guide, the WLAN Handset 2210 and WLAN Handset 2211 are referred to generically as WLAN Handset.

IMPORTANT!

User MUST end every call

The user must end every call, by pressing the **Power Off/End Call** key, to release system resources and allow the WLAN Handset to function properly. If this is not done, it will result in the ringer not ringing and you might miss an important call.

IMPORTANT!

The WLAN Handset must be fully charged before initial use. See [“Battery packs” on page 33](#).



WARNING

- Follow standard acceptance procedures before operating the WLAN Handset near life-support systems.
- To minimize risk of interference, pacemaker users should not carry the WLAN Handset next to the pacemaker.
- Avoid placing the WLAN Handset near small metallic objects. The WLAN Handset earpiece attracts magnetic objects.
- The WLAN Handset produces noise noticeable to hearing aid users. Use a headset compatible with hearing aids.
- 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.



CAUTION

Loud noise environment: The WLAN Handset has been designed to produce optimal voice quality. However, when used in extremely loud noise environments (for example, close to working heavy machinery), users may experience degradation in call quality performance due to echo. Avoid using the WLAN Handset when traversing these types of environments.

Introduction

This guide contains information about:

- “WLAN Handset buttons and keys” on page 5
- “WLAN Handset display” on page 6
- “The states of the WLAN Handset” on page 8
- “Setting up the WLAN Handset” on page 10
- “Feature and function keys” on page 15
- “Basic call features” on page 19
- “Push-to-Talk” on page 22

The following figure shows the WLAN Handset 2210 and WLAN Handset 2211.

Figure 1 WLAN Handset 2210 and WLAN Handset 2211



WLAN Handset buttons and keys

The following figure shows the WLAN Handset 2210 and WLAN Handset 2211 buttons and keys.

Figure 2 WLAN Handset 2210 and WLAN Handset 2211 buttons and keys



The following table describes the WLAN Handset buttons and keys.

Table 1 WLAN Handset buttons, keys, and descriptions (Sheet 1 of 2)

	Button/key	Description
A		Power On/Start Call key Turns on the handset. This key also affects some of the states of the handset. See “The states of the WLAN Handset” on page 8.
B		Power Off/End Call key Ends an active call and turns off the handset. The user must end every call to release system resources and allow the handset to function properly.

Table 1 WLAN Handset buttons, keys, and descriptions (Sheet 2 of 2)

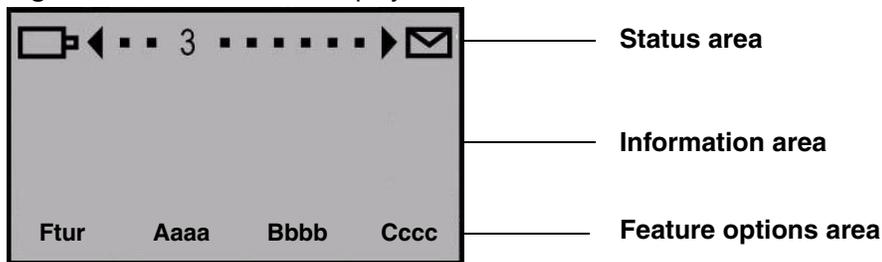
	Button/key	Description
C	Ft.re 	Feature and Display soft keys The first of the four soft keys is the Feature soft key, which starts or ends a feature. The next three soft keys are Display keys, which show feature options.
D		Menu key Displays the full description of the Display soft keys abbreviations and accesses the handset features.
E		Function key Accesses handset functions when in active (idle) state. The Function key also provides access to the User Option menu in the standby state.
F		Line key Accesses the Feature menu. For more information on Feature menu. See “Feature menu – LINE key” on page 17.
G		Up, Down, and Select buttons Enables you to navigate and activate the various menu options. Adjusts the speaker and ringer volume.
H		Push-to-Talk button Push-to-Talk is available on the WLAN Handset 2211 only. Activates the Push-to-Talk feature on the WLAN Handset 2211. For more information on the Push-to-Talk feature. See “Push-to-Talk” on page 22.

WLAN Handset display

There are three areas to the WLAN Handset display:

- Status area
- Information area
- Feature options area

The following figure shows an example of the WLAN Handset display.

Figure 3 WLAN Handset display

Status area

The status area displays the handset status. It can include:

- status indicators (see the table below)
- left and right arrows
- a series of dots representing the line keys, which change to a number when active

The following table describes the status indicators on your WLAN Handset.

Table 2 Status indicators

No Service	You are outside the coverage area and cannot receive or place calls. An audible alarm also sounds. Return to the coverage area to re-establish the connection.
	Your battery pack charge is low. An audible beep also sounds. Replace your battery pack within two minutes.
	You have a new voicemail message.
Melody	A melody is played when the WLAN Handset is turned on for the first time following a completed charge.

Note: The **No Service** status indicator displays in the information area of the handset display.

Information area

The Information area shows:

- the extension number of the handset
- a line for general information
- features and call information when the handset is in use

Feature options area

When a feature is activated, or when you are on an active call, the Feature options area shows you the action you must take to proceed.

For example: **Pwd**. This means you must enter your mailbox password.

The Feature options area shows the label for the **Free** soft key and for the three display soft keys. These button labels appear directly above the Feature and display soft keys, and to the right of the **Free** label on the display. These button labels vary, depending on the feature in use.

Note: The WLAN Handset does not support scrolling. Therefore any features that require the ability to scroll are not supported.

The states of the WLAN Handset

The WLAN Handset can be in one of the states described in the following table.

IMPORTANT!

User MUST end every call

The user must end every call, by pressing the **Power Off/End Call** key, to release system resources and allow the WLAN Handset to function properly. If this is not done, it will result in the ringer not ringing and you might miss an important call.

Table 3 States of the WLAN Handset (Sheet 1 of 2)

State	Description
Power off	The handset is turned off. It is not registered with the Call Server. Normally the handset enters the power-off state when the user presses Power Off/End Call for approximately two seconds when the set is in the standby state. The batteries can be recharged in the power-off state.
Standby	This is the normal state when the handset is online but inactive. In the standby state, the handset can receive calls and access the User Option menu. To perform other operations, the handset must be active (off-hook). The standby state uses less power than the active (idle) state. The batteries can be recharged in the standby state. When the handset is in the standby state, the programmed extension number is shown in the display area.
Active (off-hook)	This is equivalent to a regular telephone being off-hook. The handset goes to the active (off-hook) state by pressing Power On/Start Call when the handset is in the standby or active (idle) states.
Active (idle)	This is equivalent to a regular telephone being idle. The active (idle) state is reached in three ways: <ul style="list-style-type: none"> • The user presses MENU when the handset is in the standby state. • An incoming call in the Standby state causes the handset to go to the active (idle) state and begin ringing. • The user presses FCN and 3 when the handset is in the active (off-hook) state to access the function menu. In this state, the handset does not ring when a call comes in. In the active (idle) state, the handset and access point exchange a small packet approximately once every 15 milliseconds. This increases the power consumption and consumes bandwidth, particularly for the RF portion of the link. Therefore, the set is not normally left in the active (idle) state except for special situations.
Error	The handset enters the error state when it loses the signal from the access point. If the handset regains the signal within approximately 20 seconds, it returns to its state when it lost the signal. If the handset is out of range for longer than 20 seconds, the set restarts and returns to the standby state. For more information on error messages, see "Display messages" on page 27 .

Table 3 States of the WLAN Handset (Sheet 2 of 2)

State	Description
Active call	The handset enters the active call state when a user is in an active conversation. To enter this state, the user either makes a call or answers an incoming call.
Push-to-Talk (WLAN Handset 2211 only)	The Push-to-Talk state begins with the first Push-to-Talk transmission and ends when there has been no two-way radio traffic on the channel for 10 seconds. While in the Push-to-Talk state, it is not possible to use the keypad for any other functions. However, it is possible to place and receive telephone calls.

Setting up the WLAN Handset

This section describes the following initial setup options for your WLAN Handset:

- “Select Ring Type” on page 10
- “Select Noise Mode” on page 11
- “Enter Extension” on page 11
- “Set up Push-to-Talk” on page 12
- “Adjust ringer volume” on page 12
- “Adjust speaker volume” on page 12
- “Silence the ringer” on page 13

Select Ring Type

The Ring Type option enables you to set the WLAN Handset ring tone for the three different ringers: Telephone, Auxiliary 1, and Auxiliary 2. Auxiliary 1 and Auxiliary 2 are reserved for future use.

Select the Ring Type:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **RING TYPE**.
- 3 Press the **Select** button (or **OK**) to select **RING TYPE**.
- 4 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Telephone**.
- 5 Press the **Select** button (or **OK**) to select **Telephone**.
- 6 Press the **Up** and **Down** buttons to scroll through the menu and highlight one of the following settings:
 - Normal: Produces an audible ring (default).
 - Vibrate: Vibrates.
 - Vib/Norm: Vibrates for six seconds, then rings.
- 7 Press the **Select** button (or **OK**) to select the setting.
- 8 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press **Exit** from the top-level menu to exit the menu and return to the active (off-hook) state.

Select Noise Mode

The Noise Mode option enables you to adjust the WLAN Handset for different levels of noise within the working environment.

Select the Noise Mode:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Noise Mode**.
- 3 Press the **Select** button (or **OK**) to select **Noise Mode**.
- 4 Press the **Up** and **Down** buttons to scroll through the menu and highlight one of the following settings:
 - Normal: For most office environments (default).
 - High: For moderate background noise.
 - Severe: For extremely noisy conditions.
- 5 Press the **Select** button (or **OK**) to select the setting.
- 6 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press **Exit** from the top-level menu to exit the menu and return to the active (off-hook) state.

Enter Extension

The Extension option enables the user to enter the extension number for the WLAN Handset. This number is used to identify the handset. It displays when the handset is in the standby state.

Note: Nortel Networks recommends you enter the Directory Number (DN) of the system or the full number of your handset. When the WLAN Handset is in the active (idle) state, the DN of the system displays.

Enter the Extension number:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Extension**.
- 3 Press the **Select** button (or **OK**) to select **Extension**.
- 4 Enter the extension number using the handset keypad.
- 5 Press **Save** to save your extension number.
- 6 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press **Exit** from the top-level menu to exit the menu and return to the active (off-hook) state.

Set up Push-to-Talk

Push-to-Talk is available on the WLAN Handset 2211 only.

Push-to-Talk mode enables two-way radio communication with another WLAN Handset 2211 user. You can enable/disable Push-to-Talk mode and select a channel.

Set up Push-to-Talk for the handset:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Push-to-Talk**.
- 3 Press the **Select** button (or **OK**) to select **Push-to-Talk**.
- 4 Press the **Up** and **Down** buttons to scroll through the menu and highlight one of the following settings:
 - **Enable**: Enables Push-to-Talk mode.
 - **Disable**: Disables Push-to-Talk mode.
- 5 Press the **Select** button (or **OK**) to select the setting.
- 6 If enabled, select a channel (1 to 8).
- 7 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press **Exit** from the top-level menu to exit the menu and return to the active (off-hook) state.

Adjust ringer volume

You can increase or decrease the ringer volume of the WLAN Handset 2211 only.

To adjust the ringer volume, press the **Up** or **Down** button while the handset is ringing.

Adjust speaker volume

You can increase or decrease the speaker volume of the WLAN Handset.

To adjust the speaker volume, press the **Up** or **Down** button while in a call.

Silence the ringer

You can silence (or mute) the WLAN Handset ringer.

To silence the ringer, press  while the handset is ringing.

Feature and function menus

You can view the features and functions programmed in your system using various menus, soft key features, and the Line (DN) features. You can access some functions and features using one or more of the methods described in this section.

This section describes the WLAN Handset feature and function menus:

- “Feature and function keys” on page 15
- “Soft Key Abbreviations menu – MENU key” on page 16
- “Function menu – FCN key” on page 16
- “Feature menu – LINE key” on page 17

Note: For more information about the features available to your WLAN Handset and how to use them, refer to the *Business Communications Manager Telephone Feature Card*.

Feature and function keys

The following table lists the features and functions available on the WLAN Handset, along with their key sequence.

Table 4 WLAN Handset feature and function keys

Key sequence	Feature/Function
 + 1	Mute
 + 2	Hold
 + 3	Goodbye
 + 4	Directory
 + 5	Inbox
 + 6	Outbox
 + 7	Quit
 + 8	Copy
 + 1	Intercom
 + 2	Intercom
 + 3	Page - General
 + 4	Last Number Redial
 + 5	Conference Call
 + 6	Call Forward

Soft Key Abbreviations menu – MENU key

Use the Soft Key Abbreviations menu to view the full description of the soft key abbreviations and access the WLAN Handset features.

Activate a feature

- 1 Place the handset in the active (idle) or active (off-hook) state.
- 2 Press  to view the Soft Key Abbreviations menu.
- 3 Press the **Up** and **Down** buttons to scroll through the list of features. The full description is highlighted in the display area.
- 4 Do one of the following:
 - Press the **Select** button (or **OK**) to activate the highlighted feature.
 - Press the appropriate number key. The feature does not have to be highlighted.

Function menu – FCN key

Use the Function menu to view and activate the WLAN Handset functions.

Activate a function

- 1 Place the handset in the active (idle) or active (off-hook) state.
- 2 Press  to display the first four functions in the display area. Press  again to view more functions.
- 3 Press the **Up** and **Down** buttons to scroll through the list of functions. The abbreviation is highlighted in the display area.
- 4 Do one of the following:
 - Press the **Select** button (or **OK**) to activate the highlighted feature.
 - Press the appropriate number key. The feature does not have to be highlighted.

Feature menu – LINE key

Use the Feature menu to view and activate the WLAN Handset line features. These features are programmed on each handset using the six line keys (number keys 1 through 6).

Note: A feature must be available on the system before it can be programmed on a handset.

Activate a feature

- 1 Place the handset in the active (idle) or active (off-hook) state.
- 2 Press  to view the first screen of the Feature menu. Press  again to view the second screen.
- 3 Press the **Up** and **Down** buttons to scroll through the list of features. The abbreviation is highlighted in the display area.
- 4 Do one of the following:
 - Press the **Select** button (or **OK**) to activate the highlighted feature.
 - Press the number key (1 through 6) corresponding to the desired feature. The feature does not have to be highlighted.

Program Feature menu items

You must be in the active (off-hook) state to program a Feature menu item.

External autodial

- 1 Press **Feature** *1.
- 2 Press  and a number key (1 through 6) corresponding to an available key.
- 3 Dial the external number, including routing codes.
- 4 Press **OK** to store the number.

Internal autodial

- 1 Press **Feature** *2.
- 2 Press  and a number key (1 through 6) corresponding to an available key.
- 3 Dial the extension number.
- 4 Press **OK** to store the number.

Features

- 1 Press **Feature** *3.
- 2 Press  and a number key (1 through 6) corresponding to an available key.
- 3 Press **Feature** and enter the feature code.

- 4 Press **OK** to store the feature code.

Erase memory buttons

- 1 Press **Feature** *1.
- 2 Press **LINE** and a number key (1 through 6) corresponding to an available key.
- 3 Press **OK** to erase the button.

Features, functions, and buttons

This section describes some of the WLAN Handset buttons and call features:

- [“Basic call features” on page 19](#)
- [“Push-to-Talk” on page 22](#)

Note: For more information about the features available to your WLAN Handset and how to use them, refer to the *Business Communications Manager Telephone Feature Card*.

IMPORTANT!

User **MUST** end every call

The user must end every call, by pressing the **Power Off/End Call** key, to release system resources and allow the WLAN Handset to function properly. If this is not done, it will result in the ringer not ringing and you might miss an important call.

Basic call features

You can make external and internal calls using the following features:

- Make a call
- Answer a call
- Hold a call
- Use the headset
- Mute a call

Make a call

There are many ways to make a call, depending on your handset programming and the type of call.

External calls using line keys

- 1 Press  to go off-hook.
- 2 Press  to access the Feature menu.
- 3 Press a number key (1 through 6) corresponding to the desired line key.
- 4 Dial the external number.

External calls using intercom keys

- 1 Press  to go off-hook.
- 2 Press  to access the Feature menu.

- 3 Press a number key (1 through 6) corresponding to the desired intercom key and enter a line pool access code or destination code.
- 4 When you hear an external dial tone, dial the external number.

Note: Contact your system administrator for a list of line pool codes. PRI lines do not support line pool access codes; they must be configured as a destination code. When entering a destination code on PRI lines, you will not hear dial tone.

Internal calls using intercom buttons

- 1 Press  to go off-hook.
- 2 Press  to access the Feature menu.
- 3 Press a number key (1 through 6) corresponding to the desired intercom key.
- 4 Dial the extension number.

Note: Contact your system administrator for a list of extension numbers.

Answer calls

When your handset rings or vibrates, a line number on the display flashes, and the display shows information about the call, such as the caller's name and extension:

- Press .

Hold

- While on a call, press  and . The indicator for the line on hold flashes.
- To retrieve a held call, press , while in the active (off-hook) state. Then press the number key corresponding to the flashing line number.

Headset

You must have a headset installed on your handset to use this feature.

- Connect the headset to the headset jack. Follow the steps in “Make a call” on page 25 to make your call.
- To answer a call with a headset plugged into your handset, press any key other than **Power On/Start Call**, **Power Off/End Call**, the soft keys, or the **Up/Down/Select** buttons.

Mute

- While on a call, press  and  to turn the microphone off.
- Press  and  again to turn the microphone on.

End calls

You must end every call, by pressing the **Power Off/End Call** key, to release system resources and allow the WLAN Handset to function properly.

If this is not done, it will result in the ringer not ringing for the next call and you might miss an important call.

Push-to-Talk

Push-to-Talk is available on the WLAN Handset 2211 only.

Push-to-Talk mode enables WLAN Handsets 2211 to operate in a group broadcast mode in addition to the standard handset operation. The WLAN Handset 2211 supports eight multicast channels with the current channel saved in the handset memory.

IMPORTANT!

Pressing any other keys or buttons (such as the **Up/Down/Select** or keypad keys) while in a Push-to-Talk call will terminate the call.

The call period

Push-to-Talk mode operates on the concept of a call period. The Push-to-Talk call period begins with the first transmission and ends when there has been no two-way radio traffic on the channel for 10 seconds.

The Push-to-Talk mode controls the handset keypad during the call period. Therefore, it is not possible to use the keypad for any other functions. However, it is possible to place and receive telephone calls.

Initiate a Push-to-Talk call

- 1 Press the **Push-to-Talk** button on the right side of the handset.

The “start transmit” tone sounds within two seconds. The channel is active and the display screen shows the current active channel.

- 2 Speak into the handset’s microphone.

All WLAN Handsets 2211 that are monitoring that channel hear the transmission.

- 3 Release the **Push-to-Talk** button.

The “end transmit” tone sounds. The handset enters the waiting state, where it monitors the channel for up to 10 seconds.

Receive a Push-to-Talk transmission

Upon receiving a Push-to-Talk transmission, the “receiving alert” tone sounds and the WLAN Handset 2211 enters the receive state.

In this state, the handset receives all conversations on the selected channel. The display shows the current active channel, the caller ID of the current transmitter, and an indication that the handset is receiving a broadcast transmission.

At the end of a transmission, the handset enters the waiting state, where it monitors the channel for up to 10 seconds and displays “Waiting” on the screen. If no other transmission occurs within 10 seconds, the “end call” tone sounds and the handset becomes idle.

Respond to a Push-to-Talk call

- 1 When you hear a transmission, press the **Push-to-Talk** button on the right side of the handset. The “start transmit” tone sounds. Since all handsets on that channel are already in the receive state, there is no two-second delay.
- 2 Speak into the handset’s microphone. If no transmission occurs during the 10-second countdown period, the “end call” tone sounds and the handset becomes idle.

Change the Push-to-Talk volume

Use the **Up** and **Down** buttons to increase or decrease volume.

A separate volume is maintained in Push-to-Talk mode.

Mute a current Push-to-Talk call

Mute affects only the current call. When the next call period starts, the audio is automatically unmuted. Mute does not allow the user to use the handset’s keypad for anything else.

- 1 Press the **Mute** soft key.
The following prompt displays:
Mute Two-Way Radio?
- 2 Press the **Yes** soft key to mute the call.
The prompt disappears after three seconds if there is no response.

Unmute a Push-to-Talk call

- 1 Press the **Unmute** soft key.
The following prompt displays:
Unmute Two-Way Radio?
- 2 Press the **Yes** soft key to unmute the call.
The prompt disappears after three seconds if there is no response.

End a Push-to-Talk call

Only the current call is terminated for this WLAN Handset 2211. When the next call period starts, the handset is again in the receive state. You can rejoin a still-active session by initiating a Push-to-Talk call.

- 1 Press the **Terminate** soft key.

The following prompt displays:
Terminate Two-Way Radio?

- 2 Press the **Yes** soft key to end the call.

Push-to-Talk audio is immediately stopped and the handset returns to regular mode.

Answer a call during a Push-to-Talk call

An incoming call can be answered while in a Push-to-Talk call. To announce an incoming call, the WLAN Handset 2211 rings with a low-volume ring and displays a system message.

- 1 Press .

The Push-to-Talk session is pre-empted.

- 2 After the call is over, press  as usual to go back on-hook.

The Push-to-Talk session goes out of pre-empted mode and becomes active again. If an active Push-to-Talk call has not ended, the audio is heard again.

Make a call during a Push-to-Talk call

A call can be made while in a Push-to-Talk call.

- 1 Press .

The Push-to-Talk session is pre-empted.

- 2 After the call is over, press  as usual to go back on-hook.

The Push-to-Talk session goes out of pre-empted mode and becomes active again. If an active Push-to-Talk call has not ended, the audio is heard again.

Troubleshooting

This section describes the options to view specific information about your WLAN Handset and error messages displayed by your WLAN Handset. This information is useful in troubleshooting numerous problems.

This section contains information about:

- “View Alias IP Address” on page 25
- “View Current IP Address” on page 25
- “View Current Call Server” on page 26
- “View Terminal Type” on page 26
- “Display messages” on page 27

View Alias IP Address

The Alias IP Address option shows the IP address currently assigned to the WLAN Handset by the call server. The Alias IP Address option is for display purposes only. You cannot edit this option.

View the Alias IP Address:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Alias IP Addr.**
- 3 Press the **Select** button (or **OK**) to view the alias IP address for the handset.
- 4 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press **Exit** from the top-level menu to exit the menu and return to the active (off-hook) state.

View Current IP Address

The Current IP Address option enables you to view the current IP address of the WLAN Handset. The Current IP Address option is for display purposes only. You cannot edit this option.

View the Current IP Address:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Current IP Addr.**
- 3 Press the **Select** button (or **OK**) to view the current IP address for the handset.
- 4 Do one of the following:
 - Press **UP** to return to the previous menu and set another option.

- Press  to exit all menus and return to the standby state.

You can also press Exit from the top-level menu to exit the menu and return to the active (off-hook) state.

View Current Call Server

The Current Call Server option shows the Call Server IP address and port number. This option is for display purposes. You cannot edit this option.

View the Current Call Server:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Current Call Svr.**
- 3 Press the **Select** button (or OK) to view the current call server IP address and port number for the handset.
- 4 Do one of the following:
 - Press UP to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press Exit from the top-level menu to exit the menu and return to the active (off-hook) state.

View Terminal Type

The Terminal Type option shows the handset type used by the system. The Terminal Type option is for display purposes only. You cannot edit this option.

View the Terminal Type:

- 1 Press  when in the standby state.
- 2 Press the **Up** and **Down** buttons to scroll through the menu and highlight **Terminal Type.**
- 3 Press the **Select** button (or OK) to view the terminal type for the handset.

Note: The terminal type must be **i2004**. If it is not, please contact your system administrator.
- 4 Do one of the following:
 - Press UP to return to the previous menu and set another option.
 - Press  to exit all menus and return to the standby state.

You can also press Exit from the top-level menu to exit the menu and return to the active (off-hook) state.

Display messages

The following table lists the messages that can appear on your WLAN Handset. If a message appears that cannot be resolved, contact your system administrator.

Table 5 WLAN Handset messages, descriptions, and actions (Sheet 1 of 3)

Message	Description	Action
3 chirps	WLAN Handset is not able to communicate with the best access point, probably because that access point has no bandwidth available.	None. This is only a warning. The call will handoff to the best access point once it becomes available.
(battery icon), Low Battery message, and beep	Low battery	In call: the battery icon displays and a soft beep is heard when the user is on the WLAN Handset and the battery charge is low. User has 15–30 minutes of battery life left. Not in call: The battery icon displays whenever the battery charge is low. The message Low Battery and a beep indicate a critically low battery charge. The WLAN Handset will not work until the battery pack is charged.
Battery Failure	The battery pack is not functioning.	Replace the battery pack with a new or confirmed Nortel Networks battery pack. Any non-Nortel Networks battery packs will not work.
Charging ...	The WLAN Handset is charging in the Desktop Charger.	No action needed.
Charge Complete	The WLAN Handset is now fully charged.	No action needed.
Checking Code	The WLAN Handset is checking for a newer version of software that should be downloaded.	None. This message lasts for approximately one second. If message remains displayed, power off the WLAN Handset and contact your system administrator.

Table 5 WLAN Handset messages, descriptions, and actions (Sheet 2 of 3)

Message	Description	Action
DHCP Error (1-4)	DHCP Error 1	The WLAN Handset cannot locate a DHCP server. It will try every four seconds until a server is located.
	DHCP Error 2	The WLAN Handset has not received a response from the DHCP server to a request for an IP address. It will retry until a DHCP server is found.
	DHCP Error 3	The server refuses to lease the WLAN Handset an IP address. It will keep trying.
	DHCP Error 4	The DHCP server offered the WLAN Handset a lease that is too short. The minimum lease time is 10 minutes. One hour is the minimum recommended lease time.
	Can't Renew DHCP	Contact your system administrator.
Erase Failed	Download process failed to erase the memory in the WLAN Handset.	If error "int. error: 0F" is displayed, turn the WLAN Handset off, then on again. If error persists, contact your system administrator.
Erasing memory	The WLAN Handset has determined that a download should occur and is erasing the current software from memory.	None. When the progress bar fills the display line, the erase operation is complete.
Internal Err. # #	The WLAN Handset has detected a fault from which it cannot recover.	Record the error code so it can be reported. Turn the WLAN Handset off, then on again. If error persists, contact your system administrator.
Multiple GW	The WLAN Handset is attempting to communicate with two WLAN IP Telephony Managers 2245.	Contact your system administrator.
Network Busy	All access points are full or busy.	Try call again later.
No IP Address	Invalid IP address.	Contact your system administrator.
No Net Access	Cannot authenticate/associate with access point	Contact your system administrator.
No Net Found	Can be caused by a variety of issues	Contact your system administrator.
No Reg Domain	Regulatory Domain not set	Contact your system administrator.
No PBX Response	The WLAN Handset tried to send a message to the Call Server and failed to get a response.	Contact your system administrator.

Table 5 WLAN Handset messages, descriptions, and actions (Sheet 3 of 3)

Message	Description	Action
Server Busy	The WLAN Handset is attempting to download from a TFTP Server that is busy downloading other devices and refusing additional downloads.	None. The WLAN Handset will automatically retry the download every few seconds.
System Locked (with Busy Tone)	System is locked	Try the call again, system has been locked for maintenance.
System Busy (with Busy Tone)	System is busy or out of resources	All call paths are in use, try the call again in a few minutes.
TFTP ERROR(x):yy	A failure has occurred during a software download.	Power off the WLAN Handset, then turn it on again to retry the download. If the error persists, contact your system administrator.
Updating Code	The WLAN Handset is downloading new software into memory. The number icons at the bottom of the display indicate which file number is currently being downloaded. This message also displays a progress bar. When the progress bar fills the display line, the update operation is complete on that file.	None. Do not turn the WLAN Handset off during this operation.
Waiting	The WLAN Handset has attempted some operation several times and failed, and is now waiting for a period of time before attempting that operation again.	None. The WLAN Handset is waiting for a specified period of time before attempting that operation again.

WLAN Handset, headset, batteries, and chargers

This section contains information about:

- [“Cleaning your WLAN Handset” on page 31](#)
- [“The headset” on page 32](#)
- [“Battery packs” on page 33](#)
- [“Desktop Charger” on page 35](#)
- [“Gang Charger” on page 37](#)
- [“Clean the Desktop Charger” on page 38](#)
- [“Important Safety Instructions and Product Information” on page 39](#)

Cleaning your WLAN Handset

The WLAN Handset occasionally must be cleaned to maintain appearance. In general, wiping the handset surface with a clean water-dampened cloth or paper towel removes most films or residues.

If more rigorous cleaning is required, you can use:

- A mild detergent solution. Be sure to wipe away any detergent residue with a plain water-dampened cloth.
- Any general-purpose household glass and surface cleaner. Do not spray the handset directly. Spray the cleaner on a soft cloth or paper towel, then wipe the handset.
- Pre-treated cloths, like those used for eyeglasses or cameras.
- Pre-moistened towelettes. Avoid those containing lanolin or aloe, which leave a slippery residue.
- Isopropyl alcohol, applied by a damp cloth or paper towel. When using alcohol, do not rub the keypad characters vigorously, as this will significantly degrade legibility.

IMPORTANT!

- Do not use furniture polishes, waxes, or plasticizer-based cleaner.
 - Do not use lanolin, aloe, glycerin, or other skin care products.
 - Do not apply any solvent such as acetone or mineral spirits.
 - Do not directly spray or immerse the handset.
-

If the headset connector becomes dirty, you may experience a scratchy or intermittent signal. To clean the connector, dip the padded end of either a wooden- or paper-handled cotton swab in isopropyl alcohol. Gently insert in the connector and twist, repeating several times. If available, blow compressed air into the connector to clear debris.

The headset

Nortel Networks offers optional headsets, with a quick-disconnect jack, for use in noisy environments or for use if you need to have your hands free while talking. The headset is not available in all regions.

To use the headset, simply plug it into the jack on the bottom of your WLAN Handset. If the headset is disconnected using the quick-disconnect jack, there is no audio connection on the headset or the speaker and microphone in the WLAN Handset.

The headset is specifically designed to work with the WLAN Handset. Nortel Networks does not recommend using other headsets.

The following figure shows the headset jack for the WLAN Handset.

Figure 4 WLAN Handset bottom view



IMPORTANT!

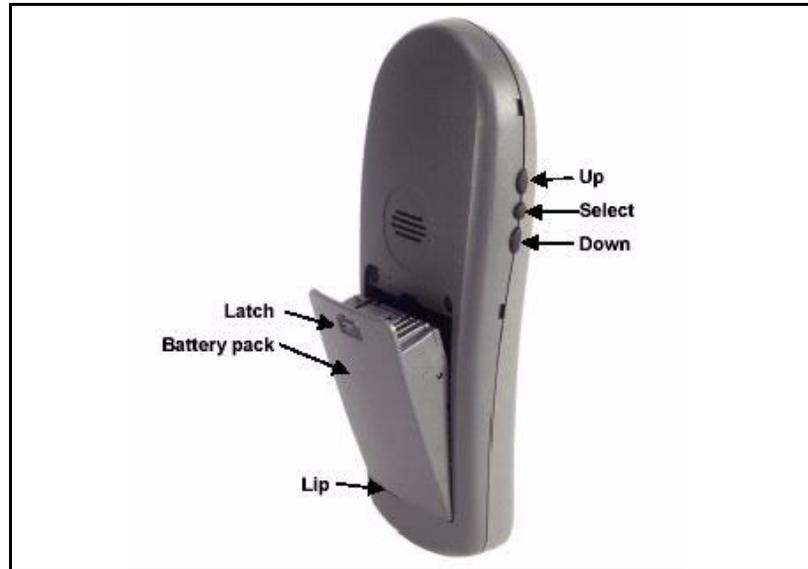
The only authorized headsets that can be used with WLAN Handset are those obtained from Nortel Networks, Plantronics, or their reseller partners.

Battery packs

The battery pack for the WLAN Handset must be recharged periodically. The Nickel Metal Hydride (NiMH) rechargeable battery pack provides four hours of talk time or 70 hours of standby time. Standby time is when the handset is turned on, but not in an active call.

The following figure shows the location of the battery pack.

Figure 5 WLAN Handset battery pack location



Low battery indicators

The WLAN Handset notifies you when the charge on the battery pack is low by displaying the battery icon. If you are not in a call, you hear a loud beep. If you are in a call, you hear a soft beep through the earpiece every six seconds. At this point, your handset has 15 to 30 minutes of battery life left.

The Low Battery message in the display area and a loud beep indicate a critically low charge. The handset will not work until the battery pack is charged.

Remove and insert the battery pack

Remove the battery pack

To release the battery pack, press both battery release buttons on the left and right sides of the handset.

Insert the battery pack

Slide the battery pack straight into the handset cavity.

Do not force the battery pack into the handset.

Change the battery pack while in a call

- 1 Use Call Park to park the current call.
- 2 Quickly remove the discharged battery pack and replace it with a charged battery pack.
- 3 Press  to turn the handset back on.
- 4 Use Call Park to retrieve the parked call.

Desktop Charger

The Nortel Networks WLAN Handset Desktop Charger is designed to fully charge the Nickel Metal Hydride (NiMH) battery packs in approximately one and a half hours. The charger operates in a 50° to 85° F (10° to 30° C) environment. Do not expose the charger to freezing temperatures or direct sunlight.

The following figure shows the WLAN Handset 2210 and WLAN Handset 2211 Desktop Chargers.

Figure 6 The WLAN Handset 2210 and WLAN Handset 2211 Desktop Chargers



The charger is shipped with the appropriate power supply for the site. Place the charger on a flat, horizontal surface. Plug the power supply into the charger and into an appropriate wall outlet.

IMPORTANT!

Do not place anything in the Desktop Charger other than the WLAN Handset. Doing so might damage the contacts. Bent contacts can keep the WLAN Handset from charging.

Use the Desktop Charger

Charge the WLAN Handset

- 1 Press  to terminate any calls. The handset can be off or in standby mode during charging.
- 2 Place the handset, face forward, into the Desktop Charger.

The red indicator light turns on.

The indicator light does not come on when the charger slot is empty, when the handset is not inserted properly, or when the charger has no power.

- 3 Charge the battery pack.

If the handset is in standby mode, it displays its extension number and **Charging....** It is fully operational and can receive calls. If the handset is off, only **Charging...** displays and the handset cannot receive calls.

It is normal for the battery pack to become warm when charging.

- 4 When the handset is fully charged, **Charge Complete** displays. Remove the handset from the charger.

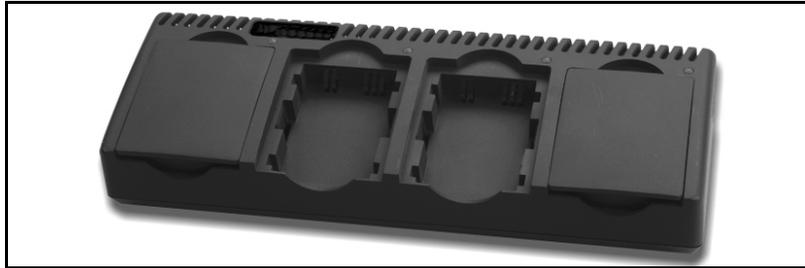
The red indicator light remains on until the handset is removed from the charger.

Gang Charger

The Nortel Networks WLAN Handset 2211 Gang Charger fully charges four Nickel Metal Hydride (NiMH) battery packs in approximately one and a half hours. Chargers operate in a 50° to 85° F (10° to 30° C) environment. Do not expose them to freezing temperatures or direct sunlight.

The following figure shows the WLAN Handset 2211 Gang Charger.

Figure 7 WLAN Handset 2211 Gang Charger



The Gang Charger comes with the appropriate power supply for the site. Place the Gang Charger on a flat, horizontal surface. Plug the power supply into the Gang Charger and into an appropriate wall outlet.

IMPORTANT!

Do not place anything in the Gang Charger other than the WLAN Handset 2211 battery packs. You might damage the contacts. Bent contacts can keep the battery packs from charging.

Use the Gang Charger

Charge the battery pack

- 1** Press both battery release buttons to remove the battery pack from the handset.
- 2** Insert the battery pack into one of the four charging bays.

The LED above the charging bay turns on. If the LED starts blinking as soon as the battery pack is inserted, remove the battery pack and reinsert it into the charger.

If the LED continuously blinks during the charging process, the battery pack is unusable. Properly dispose of the unusable battery pack.

- 3** When charging is complete, the LED turns off. Remove the battery pack from the charger.

Clean the Desktop Charger

Clean the Desktop Charger by wiping the surface with a clean, water-dampened cloth or paper towel. A mild detergent solution can be used. Be sure to wipe away any detergent residue with a plain water-dampened cloth.



CAUTION

- Unplug the charger before attempting to clean it.
 - Do not immerse the charger in water or other liquid.
 - Do not pour liquids into the charger slot.
-

The battery pack contacts on the WLAN Handset can be cleaned with isopropyl (rubbing) alcohol applied with a Q-tip, cloth, or paper towel. Do not push or pull the exposed battery pack contacts.

IMPORTANT!

- Always use the Desktop Charger provided to charge the battery pack. Other chargers can damage the battery pack.
 - Only use the original plug-in power adapter for the Desktop Charger.
 - Do not dip the battery pack in water or throw into the fire.
 - Do not dispose of the battery pack with your domestic waste. Take used battery packs to an appropriate collection point for recycling or send them back to your supplier or servicing agent.
 - Replacement battery packs are available from your supplier or servicing agent.
-

Important Safety Instructions and Product Information

Before using your telephone equipment, you should always follow basic safety instruction to reduce the risk of fire, electrical shock and injury to persons, and damage to property.

- 1 Read and understand all instructions.
- 2 Follow all warnings and instructions including those marked on the product.
- 3 Unplug this product before cleaning. Do not use liquid cleaners or aerosol cleaners. Use damp cloth for cleaning.
- 4 Do not install the telephone equipment in the bathroom or near a wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- 5 Slots or openings in the equipment are provided for ventilation to protect it from over-heating. These openings must not be blocked or covered.
- 6 The product should be operated only from the type of power source indicated on the instructions. If you are not sure of the type of power supply, consult your dealer or local power company.
- 7 Do not overload wall outlets and extension cords as this can result in fire or electrical shock.
- 8 Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire, electrical shock, or injury. Never spill liquid of any kind into this product.
- 9 To reduce the risk of electrical shock or burns, do not disassemble this product. Opening or removing covers may expose you to dangerous voltages, dangerous electrical current, or other risks. Incorrect reassemble can cause electrical shock when the appliance is subsequently used. If the product need repair, consult your dealer.
- 10 Refer servicing to qualified service personnel.
- 11 Avoid using telephone during an electrical storm. There may be a risk of electrical shock from lightning.
- 12 Do not use the telephone to report a gas leak in the vicinity of the leak
- 13 Do not place the base or charger near microwave ovens, radio equipment, or non-ground connected televisions.

These appliances may cause electrical interference to the base or handset
- 14 The charger must be placed on a hard, flat surface and connected to a functional 120 volt AC power source depending on the country of use.
- 15 This telephone will not operate in the event of a blackout. Please keep a backup phone for emergencies.

Intrinsic safety

Do not use the handset in conditions where there is a danger of electrically ignited explosions.

Exposure to sunlight, heat and moisture

Do not expose the cordless phone to direct sunlight for long periods. Keep the cordless phone away from excessive heat and moisture.

Spare parts and accessories

Use only approved spare parts and accessories. The operation of non-approved parts cannot be guaranteed and may even cause damage.

Power failure

In the event of a power failure or flat battery, you cannot use the handset to make or receive calls.

Battery Precautions

- 1 Periodically clean the charge contacts on both the charger and handset.
- 2 Exercise care in handling batteries in order not to short the batteries with conducting materials such as rings, bracelets, and keys. The batteries or conducting material may overheat and cause burns or fire
- 3 Do not open or mutilate the batteries, released electrolyte is corrosive and may cause damage to the eyes or skin. The electrolyte may be toxic if swallowed.
- 4 During charging batteries heat up. This is normal and not dangerous.
- 5 Do not use non-Nortel charging devices. This could damage the batteries.

Notices

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTIONS: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

If your telephone equipment causes harm to the telephone network, the telephone company may ask you to disconnect the system from the line until the problem has been corrected or they may discontinue your service temporarily. If possible, they will notify you in advance, But if advance notice is not practical, you should be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your telephone system, If they do and it is possible, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service. If you experience trouble with this telephone system, disconnect it from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to local regulations. 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.

Power Outage: In the event of a power outage, your cordless telephone will not operate. The cordless telephone requires electricity for operation. You should have a telephone which does not require electricity available for use during power outages.

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

