



# Polycom Documentation

Copyright © 2019, Polycom, Inc. All rights reserved. No part of this document may be reproduced, translated into another language or format, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc  
6001 America Center Drive

San Jose, CA 95002

USA

<b>1. Polycom VVX EM50 Expansion Modules. . . . .</b>	<b>3</b>
VVX EM50 Expansion Module Hardware Features. . . . .	4
Connect a VVX EM50 Expansion Module. . . . .	6
Connect an Additional VVX EM50 Expansion Module. . . . .	7
Assigning Contacts and Favorites to VVX EM50 Expansion Modules. . . . .	9
Assign Favorites to Expansion Modules. . . . .	9
Identify Line Key Assignments. . . . .	10
Navigate Expansion Module Paging. . . . .	10
Smart Paging on VVX EM50 Expansion Modules. . . . .	10
Alternate Paging. . . . .	12
Changing the Backlight Intensity on the Expansion Module. . . . .	12

# Polycom VVX EM50 Expansion Modules

---

The Polycom VVX EM50 expansion module is a console supported on VVX 450 business IP phones and enables you to add additional lines to your phone.

Expansion modules enable you to handle large call volumes on a daily basis and expand the functions of your phone.

---

**Note** VVX 150, 250, and 350 phones do not support expansion modules. The VVX EM50 expansion module is only supported on VVX 450 business IP phones, running UC Software 5.8.2 or later.

---

[Answer a Call from an Expansion Module](#)

[Resume a Call on an Expansion Module](#)

[Place a Call from an Expansion Module](#)

# VVX EM50 Expansion Module Hardware Features

The following features are available on the VVX EM50 expansion module:

- 480 x 800 pixel, color LCD display
- 30 line keys and three display pages, which support a total of 90 lines that you can set up with registrations, favorites, or presence contacts.
- Support for up to two expansion modules connected to a VVX 450 business IP phone to support an additional 180 line keys per phone.

The following figure illustrates the features, components, and keys available on the VVX EM50 expansion module. The table lists each numbered feature shown below.

Figure 1. VVX EM50 Hardware Features

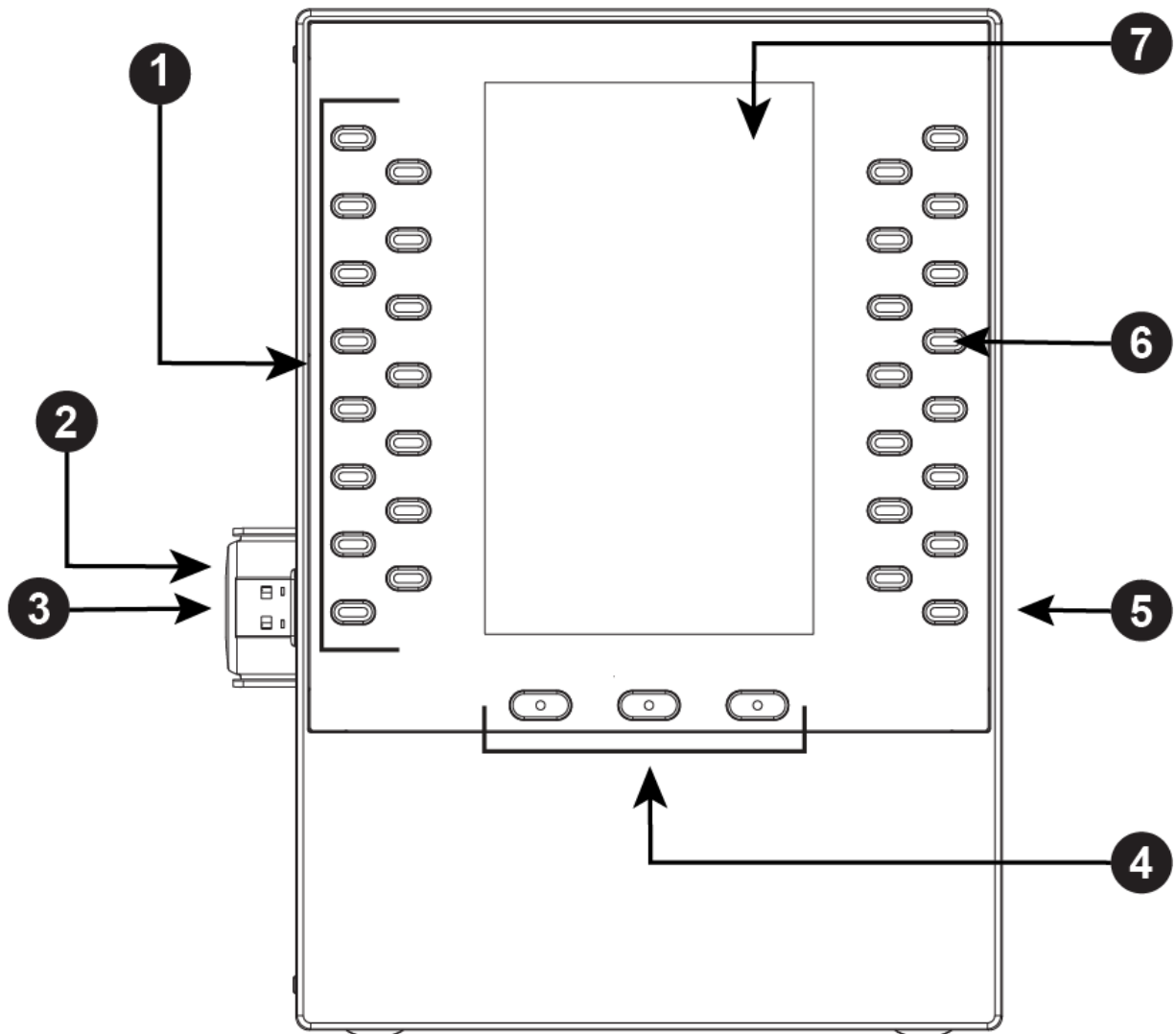


Table 1. VVX EM50 Hardware Description

Reference Number	Feature	Feature Description
1	Line keys	Selects available line key contacts, functions, and assignments.

Reference Number	Feature	Feature Description
3	USB plug	Connects the expansion module to the phone.
4	Page keys and LED indicators	<p>Navigates between pages on the expansion module.</p> <ul style="list-style-type: none"> <li>● Fast-Flashing Green—Indicates an incoming call on a page not currently displayed. Press the page key that has a fast-flashing green LED indicator to view the contact with an incoming call.</li> <li>● Slow-Flashing Green—Indicates a monitored busy lamp field contact on a page not currently displayed is receiving an incoming call.</li> <li>● Solid Red—Indicates the current page displayed.</li> </ul>
5	USB port (on side)	Enables you to connect USB devices to the expansion module, such as an additional expansion module or a USB flash drive.
6	Line key LED indicators	<p>Indicates a line or busy lamp field contact's status. The following lists the LED Indicator behaviors shown on the expansion modules:</p> <ul style="list-style-type: none"> <li>● Solid Green—Indicates an active call in progress.</li> <li>● Fast-Flashing Green—Indicates an incoming call.</li> <li>● Flashing Green—Indicates the remote party placed the call on hold.</li> <li>● Solid Red—Indicates the phone of a monitored busy lamp field contact is placing a call or is in a call.</li> <li>● Flashing Red—Indicates a held call.</li> <li>● Flashing Green and Red—Indicates the phone of a monitored busy lamp field contact is on an active call or is receiving an incoming call.</li> </ul>

Reference Number	Feature	Feature Description
7	Color Display	Displays line numbers, monitored contacts, contacts' presence, and favorites.

#### Related Topics

[Polycom VVX EM50 Expansion Modules](#)

[Overview of Phone Hardware and Keys](#)

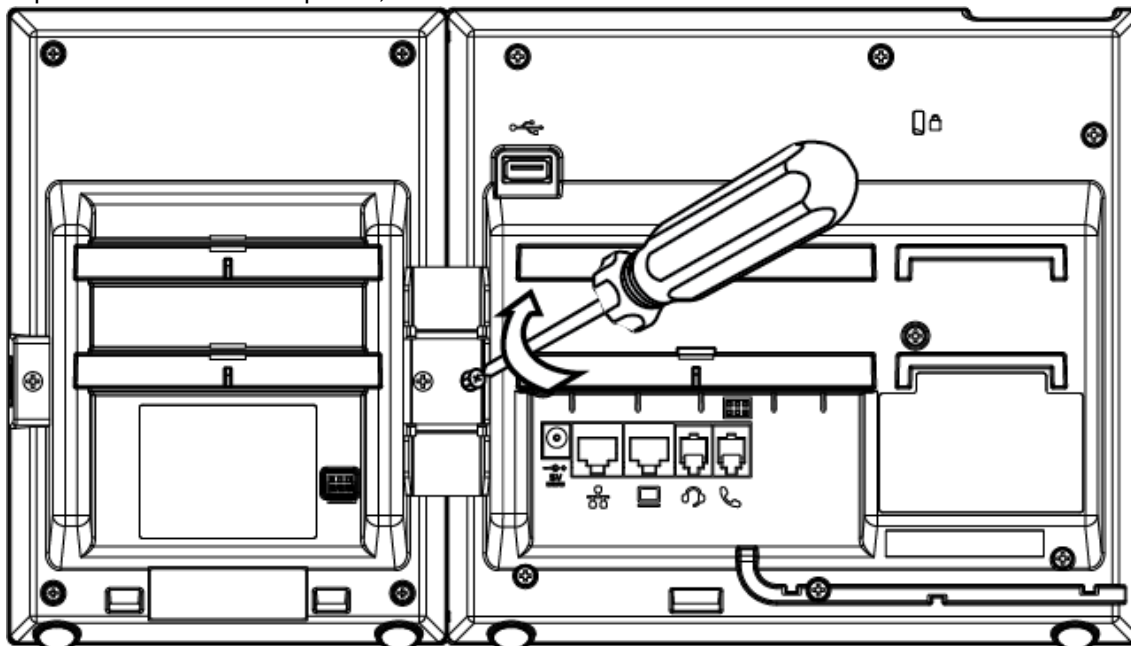
## Connect a VVX EM50 Expansion Module

Expansion modules are powered and signaled by the connected VVX phone and require minimal setup. After you connect an expansion module to a phone, the module is automatically configured to work with the phone.

#### Procedure

- 1 Power off the VVX 450 business IP phone.
- 2 Insert the USB plug on the VVX EM50 expansion module into the side USB port on the VVX 450.
- 3 Lay the connected phone and expansion module face-down on the table.

- 4 Insert the supplied screw into the bracket screw hole and, using a screwdriver, secure the expansion module to the phone, as shown.



The LED lights on the module's line keys flash red and green as the module starts up.

#### Related Topics

[Polycom VVX EM50 Expansion Modules](#)

## Connect an Additional VVX EM50 Expansion Module

You can connect up to two VVX EM50 expansion modules to a VVX 450 business IP phone.

---

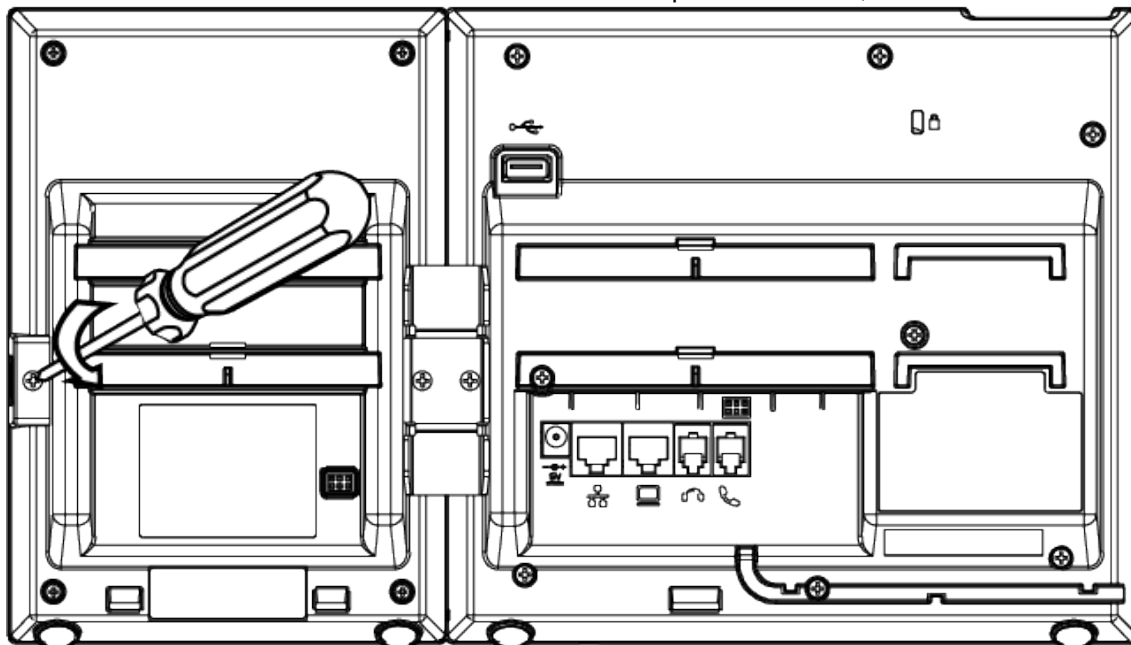
**Note** When you connect expansion modules to a VVX 450 phone, you can connect additional USB devices to the rear port of the phone and the side port on the second connected expansion module. The side USB port on the expansion module can support low-powered devices, such as headsets, USB flash drives, or a smartphone to charge the phone.

---

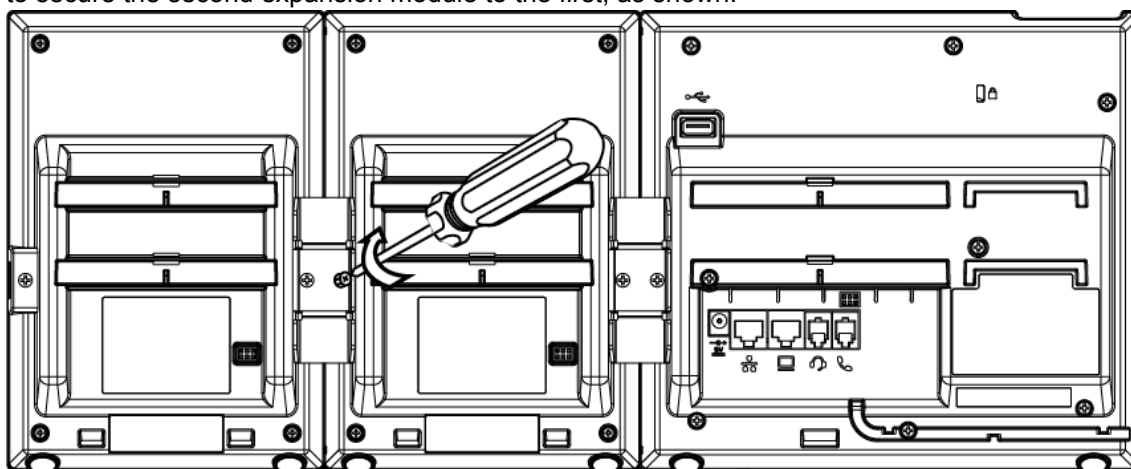
#### Procedure

- 1 Power off the VVX 450 business IP phone.
- 2 Lay the VVX 450 phone with the connected expansion module face-down on the table.

- 3 Remove the screw from the left side of the connected expansion module, as shown.



- 4 Insert the USB plug on the second VVX EM50 expansion module into the side USB port on the first connected expansion module.
- 5 Using the screw you removed from the first expansion module, use a screwdriver and the screw to secure the second expansion module to the first, as shown.



The LED lights on the module's line keys flash red and green as the module starts up.

### Related Topics

[Polycom VVX EM50 Expansion Modules](#)



# Assigning Contacts and Favorites to VVX EM50 Expansion Modules

You can assign contacts to line keys on your expansion module after the line keys on your phone are full.

The default view on your phone screen, which is the Lines screen, displays line registrations, monitored and presence contacts, and favorites. Each function occupies a display space on the Lines screen. When you reach the maximum number of display spaces on your phone, the next function you add is assigned to the first available line key on your expansion module.

The following table shows the maximum display spaces available on the VVX 450 phone and each connected expansion module.

Table 1. Maximum Display Spaces on Phone and connected Expansion Modules

VVX 450 Phone	with Expansion Module 1	with Expansion Module 2
12	102	192

---

**Note** After you fill all the display spaces on your phone and assign functions to all the lines on your expansion module, you can find additional favorites and contacts in the Contact Directory.

---

## Related Topics

[Polycom VVX EM50 Expansion Modules](#)

[Favorites and Contact Lists](#)

## Assign Favorites to Expansion Modules

You can assign favorites to line keys on connected expansion modules and automatically call contacts using the line keys on the expansion modules. When you assign favorites on your phone, favorites are assigned to the next available line key on the expansion module regardless of the index number. You can reorder your favorites once they are created by changing the value of their index number.

### Procedure

- 1 Press and hold an available line key on your expansion module.
- 2 From the **Add Contact** screen, enter the contact's information, including a unique favorite index, and select **Save**.

## Related Topics

[Assigning Contacts and Favorites to VVX EM50 Expansion Modules](#)

## Identify Line Key Assignments

You can identify which registrations, monitored or presence contacts, and favorites are assigned to each line key on your expansion module in the Status menu on your phone.

### Procedure

- 1 Navigate to **Settings > Status > Line Key Information**.
- 2 Press a line key on the expansion module.  
The assignment and line number for the line key you pressed are displayed on your phone's screen.
- 3 Press the line key twice to return to the previous menu or select **Back**.

### Related Topics

[Assigning Contacts and Favorites to VVX EM50 Expansion Modules](#)

## Navigate Expansion Module Paging

The Polycom expansion modules with color displays support three pages of line information on the LCD screen for each module connected to a supported VVX phone. Each page of the expansion module contains line registrations, monitored contacts, contacts' presence, or favorites assigned to line keys.

### Procedure

- Press a Page key beneath the screen on the expansion module.

### Related Topics

[Polycom VVX EM50 Expansion Modules](#)

## Smart Paging on VVX EM50 Expansion Modules

The Smart Paging feature arranges line key assignments and distributes pages on VVX EM50 expansion modules when two expansion modules are connected to a VVX 450 phone. This feature is enabled by default.

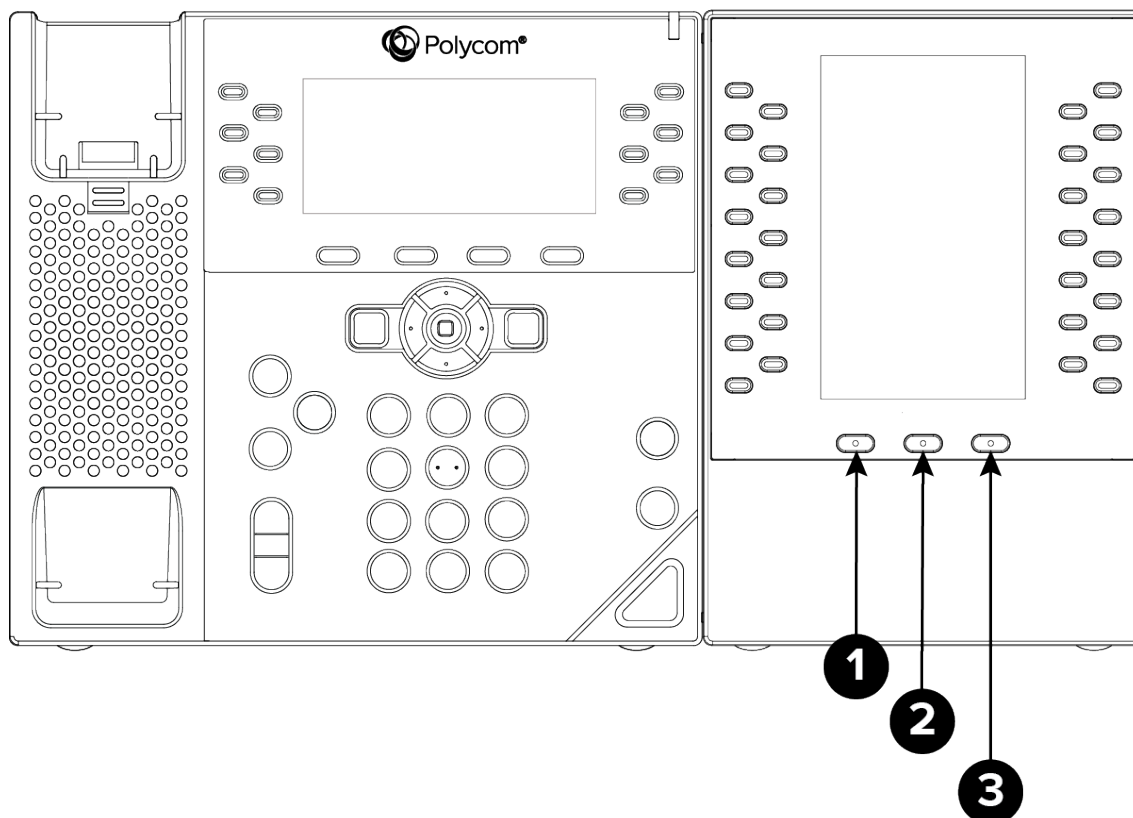
---

<b>Note</b>	If you assigned functions to line keys using the Flexible Line Key feature, the line key assignments display on the designated line key on the expansion module and are not affected by Smart Paging.
-------------	---

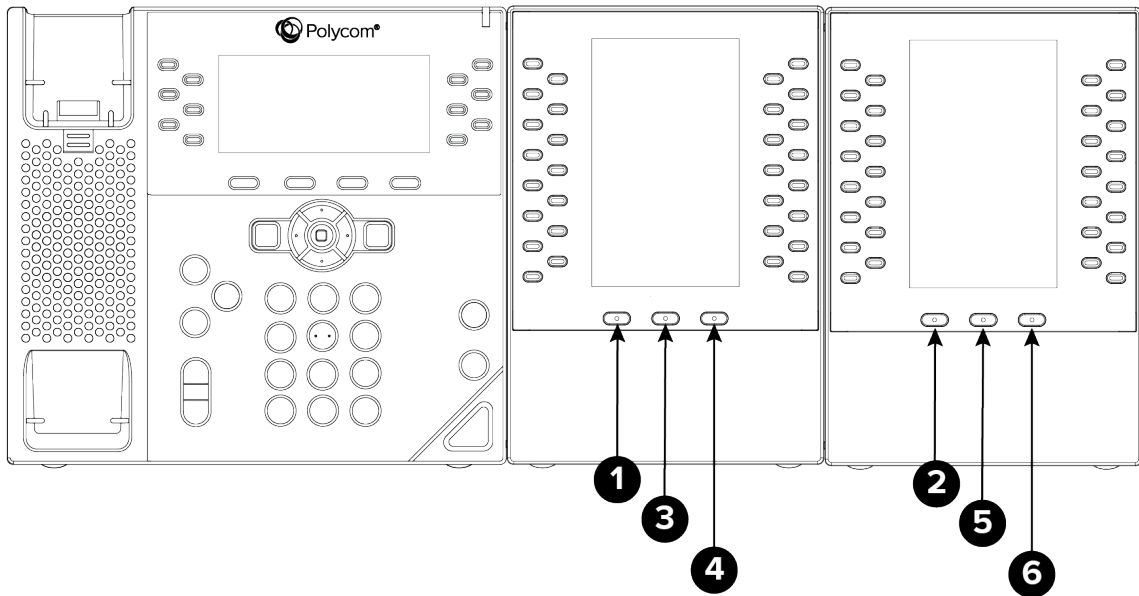
---

When Smart Paging is enabled, the pages on the expansion module are distributed across all connected expansion modules. This feature is described and shown in the following scenarios:

- If you only have one expansion module connected to your phone, the pages are ordered sequentially on the module, as shown next. Press the first, second, or third **Page** key to view the corresponding pages.



- If you have two expansion modules connected to your VVX phone, the pages are ordered non-sequentially. As shown in the next figure, the pages display on the two expansion modules in the following order:
  - Pages 1, 3, and 4 display on the first expansion module.
  - Pages 2, 5, and 6 display on the second expansion module.



#### Related Topics

[Navigate Expansion Module Paging](#)

### ***Alternate Paging***

When Smart Paging is disabled, the ordering of the pages on the expansion modules is not affected by the number of expansion modules connected to your VVX phone. With Alternate Paging, the expansion modules' pages are ordered sequentially.

#### Related Topics

[Navigate Expansion Module Paging](#)

## **Changing the Backlight Intensity on the Expansion Module**

When you change the backlight intensity settings on your VVX phone, the backlight on your connected expansion module automatically changes to match the new settings.

#### Related Topics

[Polycom VVX EM50 Expansion Modules](#)

[Backlight Intensity and Timeout](#)