

# Troubleshoot Key Expansion Modules Issues in Webex Calling

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## Introduction

This document describes the most common issues faced with Key Expansion Module (KEM) on phones registered to Webex Calling (WxC).

## Prerequisites

## Requirements

Cisco recommends that you have knowledge of these topics:

- Webex Calling
- Control Hub
- Cisco Phones

## Components Used

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

## Background Information

A Key Expansion Module extends the capabilities of IP Phones. Its purpose is to provide additional keys for speed dials, directory numbers (DN), or programmable feature keys to the 8800 IP Phones.

## Common Configuration Issues

### Ensure the correct KEM Type is configured on the Phone

**Step 1.** From the Phone keypad, press the **Applications** key

**Step 2.** Select **User preferences > Attendant console preferences > KEM type**

**Step 3.** Select the key expansion module type:

- BEKEM
- CP-8800-Audio
- CP-8800-Video

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**Note:** The correct model type can be obtained from the back of the KEM.

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**Step 4.** Click **Save** and Reset the device

## Control Hub Settings

In order to confirm the configuration of the device, navigate to **Control Hub > Devices** and select the device where the KEM is connected to:

The screenshot displays the Webex Control Hub interface. The left sidebar contains navigation options under 'MONITORING' and 'MANAGEMENT'. The 'Devices' option under 'MANAGEMENT' is highlighted with a red box. The main content area is titled 'Devices' and includes a search bar, a total count of '73 Devices in total', and filters for 'Online' (34), 'Expired', 'Issues' (0), and 'Status unavail'. Below this, there is a table of devices with columns for 'Type', 'Product', and 'Status'. The 'Phones' row is highlighted with a red box, showing 'Cisco 8851' as the product and 'Online' as the status. The 'Accessories' row shows 'Cisco 520' as the product and 'Online' as the status.

Type	Product	Status
Phones	Cisco 8851	Online
Accessories	Cisco 520	Online

On the Device Page, navigate to the **Device Management** section and select **Device Settings**.

## Device Management

The users and workspaces that appear on this device are displayed below in the order of appearance.

To add and remove users and workspaces, select **Configure Lines**.

To customize the programmable Line Keys, select **Configure Layout**.

To set up the display settings and dialing options, select **Device Settings**.

Line	Name	Number/Extension	Reg.
1	Line	41062/NA	

9 of 10 total lines available

-  **Configure Lines** Manage >
-  **Configure Layout** Manage >
-  **Device Settings** Manage >

On Device Settings, confirm that **POE Mode** is set to **Maximum** and select **Save**.

Device Settings ✕

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Off Hook Timer ⓘ

Phone Language ⓘ

**POE Mode ⓘ**

QoS ⓘ

Screensaver ⓘ  ^

Screen Timeout

Rear USB Port ⓘ

VLANs ⓘ  x v

Wifi Network ⓘ  x v

## Power Supply Compatibility

One of the most common problems with KEMs is related with POE. If the Phone uses POE, ensure that

enough power is provided to the Phone to be able to power the KEMs connected to it, and that the number of KEMs connected to the phone is supported as shown in Table 4 in [Cisco IP Phone 8800 Series Multiplatform Phones Administration Guide](#).

## Verify

Once the correct settings have been applied, the registration can be confirmed from **Control Hub > Devices**. Confirm the KEM status shows **Online**.

The screenshot shows the 'webex Control Hub' interface. The left sidebar contains navigation options: Overview, Alerts center, MONITORING (Webex Experience, Analytics, Troubleshooting, Reports), and MANAGEMENT (Users, Workspaces, Devices). The main content area is titled 'Devices' and includes a search bar, a total count of '73 Devices in total', and a status summary: Online (25), Offline (25), and Status unavailable (2). Below this is a table for bulk actions with columns for Type, Product, and Status. The table lists two rows: 'Accessories' for 'Cisco 562 Standard Base' (Online) and 'Accessories' for 'Cisco 8800 A-KEM' (Online). The second row is highlighted with a red border.

Type	Product	Status
Accessories	Cisco 562 Standard Base	Online
Accessories	Cisco 8800 A-KEM	Online

In order to configure the KEM, select the IP Phone where the KEM is connected to from the **Devices** tab on Control Hub:

The screenshot shows the 'webex Control Hub' interface. The left sidebar is similar to the previous screenshot, but the 'Devices' option is highlighted with a red border. The main content area is titled 'Devices' and includes a search bar, a total count of '73 Devices in total', and a status summary: Online (34), Expired (0), Issues (0), and Status unavail (0). Below this is a table for bulk actions with columns for Type, Product, and Status. The table lists three rows: 'Phones' for 'Cisco 8851' (Online), 'Accessories' for 'Cisco 8851' (Online), and 'Accessories' for 'Cisco 520' (Online). The first row is highlighted with a red border.

Type	Product	Status
Phones	Cisco 8851	Online
Accessories	Cisco 8851	Online
Accessories	Cisco 520	Online

On the Device Page, navigate to the **Device Management** section and select **Device Layout**.


## Device Management

The users and workspaces that appear on this device are displayed below in the order of appearance.

To add and remove users and workspaces, select **Configure Lines**.

To customize the programmable Line Keys, select **Configure Layout**.

To set up the display settings and dialing options, select **Device Settings**.

Line	Name	Number/Extension	Reg.
1	Line	41062/NA	

9 of 10 total lines available

	Configure Lines	Manage >
	Configure Layout	Manage >
	Device Settings	Manage >

In the **Configure Layout** window, the correct Key Line assignments can be configured.

## Related information

- [Cisco IP Phone 8800 Series Multiplatform Phones Administration Guide](#)
- [Cisco IP Phone 8800 Key Expansion Module Data Sheet](#)
- [Cisco Technical Support and Documentation](#)