

snom<sup>®</sup>  
snom D81x Expansion  
Module



## snom D81x Expansion Module User Manual

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snom<sup>®</sup>

**snom D81x Expansion Module**



## Product Information

### Specifications

- Product Name: D8C Expansion Module
- Compatibility: Snom D81x phone
- Version: 1.02

### Product Usage Instructions

#### Important Information

Please read the instructions on safety and disposal, and on how to set up and use the device before using it. Save this manual and do not give the device to third parties without it.

#### Safety Instructions

Follow the instructions in this manual and other applicable documentation of the device.

#### Standards Conformance

This device complies with the essential health, safety, and environmental requirements of all relevant European directives and UK legislation.

### Firmware Update

#### Manual Update via Phone's Web Interface

To update firmware manually via the phone's web interface

1. Access the phone's web interface using a web browser.
2. Navigate to the firmware update section.
3. Upload the latest firmware file.
4. Follow on-screen instructions to complete the update process.

## Update via Provisioning

To update firmware via provisioning

1. Access the provisioning settings on the device.
2. Input the provisioning server details.
3. Initiate the firmware update process.
4. Wait for the update to complete.

## Frequently Asked Questions (FAQ)

- **Q: Can I use the D8C Expansion Module with any phone?**

- A: The D8C Expansion Module is specifically designed for use with a Snom D81x phone. It may not be compatible with other phone models.

- **Q: How do I access the firmware update section on the phone's web interface?**

- A: You can access the firmware update section on the phone's web interface by logging into the interface using a web browser and navigating to the appropriate settings menu.

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## Important information

Please read the instructions on safety and disposal and on how to set up and use the device before using it and also give them to other users to read or inform those users of their contents. Save this manual and do not give the device to third parties without it.

The nameplate is located at the bottom or rear of the product.

## Safety instructions

Follow the instructions in this manual and other applicable documentation of the device.

- For use with Snom D8xx phones. Do not connect the device to a PC or to other phones!
- Mount the device only at heights not exceeding 2m.
- If the device is not supplied with power via the USB connection, use only a power adapter expressly recommended by Snom Technology. Other power supplies may damage or destroy the device, affect its behavior, or induce noise.
- Avoid placing the cables where people may trip over them or where they may be exposed to mechanical pressure as this may damage them.
- This device is for indoor use only! NOT FOR OUTDOOR USE!
- Do not install the device in rooms with high humidity (for example, in bathrooms, laundry rooms, damp basements). Do not immerse the device in water and do not spill or pour liquids of any kind onto or into the device.
- Do not install the device in surroundings at risk for explosions (paint shops, for example). Do not use the device if you smell gas or other potentially explosive fumes.
- Do not use the device during thunderstorms. Lightning striking the power grid may cause electric shocks.
- To deactivate the device, separate it from its power source.
- SELV (Safety Extra Low Voltage) compliance. Safety status of Input/Output connections comply with SELV requirements.

## Standards conformance

- This device complies with the essential health, safety, and environmental requirements of all relevant European directives and UK legislation.
- This device meets the relevant US and Canadian health, safety, and environmental standards.

The declaration of conformity can be downloaded at <https://www.snom.com/conformity> .

Unauthorized opening, changing, or modifying the device will cause the warranty to lapse and may also result in the loss of CE, FCC, and IC conformity. In case of malfunction contact authorized service personnel, your seller, or Snom.

## Important additional information USA

### FCC part 15

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.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and

can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's expense.

**WARNING:** Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.  
Important additional information Industry Canada

- This Class A digital apparatus complies with Canadian requirements: CAN ICES-3 (A)/NMB-3(A).
- This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

## Product. Specifications

- **Safety:** IEC 62368-1
- **Connectors**
  - 1 USB plug, type A, USB 2.0
  - 1 USB port, type A, USB 2.0
  - 1 x 5V DC jack
- **Power:** Via the USB connection to the phone. A power adapter (available separately) is needed for the second module which also supplies power to the third module via USB cable. The first and third module may also need a power adapter if a USB device requiring a lot of power, such as a speakerphone or conferencing device, is connected to its USB port.

Mass Power, model NBS12E050200UV, Snom PN 00004570

- **EU/UK:** shipped with EU and UK clips
- **U.S./Canada:** shipped with U.S. clip

### Note for D89x phones

The Snom 15W power supply, Snom PN 00004715, has to be purchased separately and connected to the DC power jack of the D89x phone when one or more D8Cs are connected to it.

## Disposal of the device

- This device is subject to European Directive 2012/19/EU and may not be disposed of with general household garbage.
- If you do not know where you may dispose of the device at the end of its lifespan, contact your municipality, your local waste management provider, or your seller.

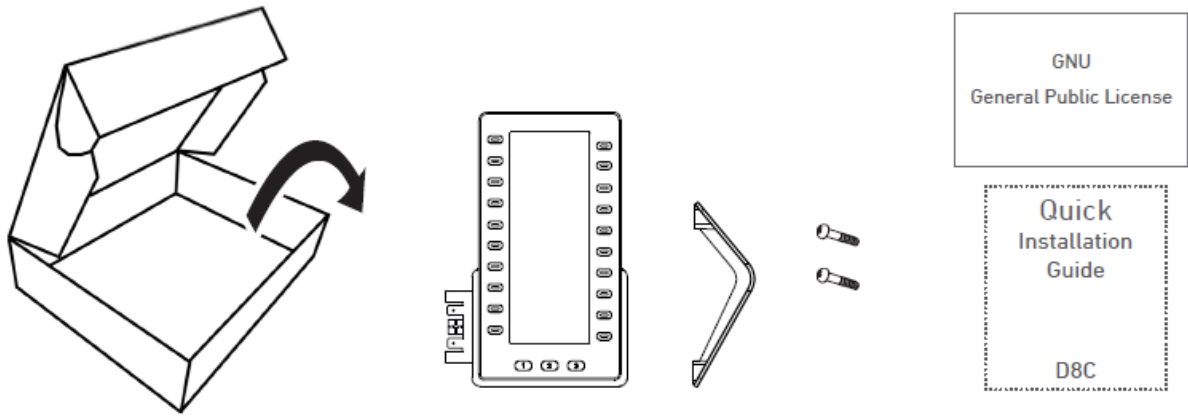
For countries outside the European Union: Disposal of electrical and electronic products in countries outside the European Union should be done in line with local regulations. Please contact local authorities for further information.

## Cleaning

To clean the device, use an anti-static cloth. Please avoid cleaning liquids as they might damage the surface or internal electronics of the device.

## Setting up the expansion module

## Delivery content



- Base unit with type A plug
- Foot stand
- 2 screws
- Quick Installation Guide, GNU General Public License

## Attaching the foot stand

1. Place the footstand below the slideguides on the back of the device (Fig. 1).
2. Push the footstand upwards onto the slideguides (Fig. 2) until it locks in place (Fig. 3).

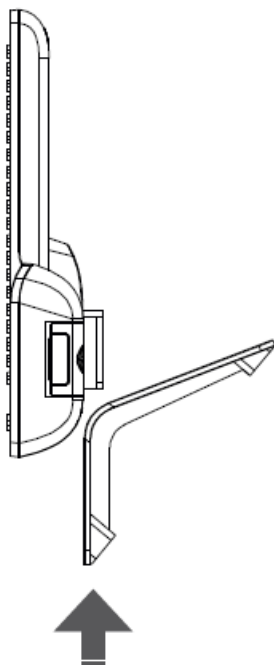


Fig. 1

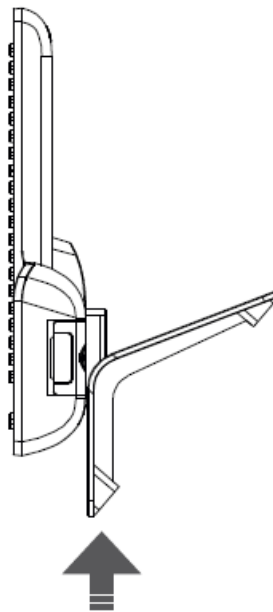


Fig. 2

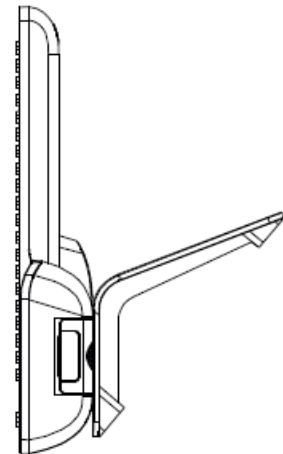


Fig. 3

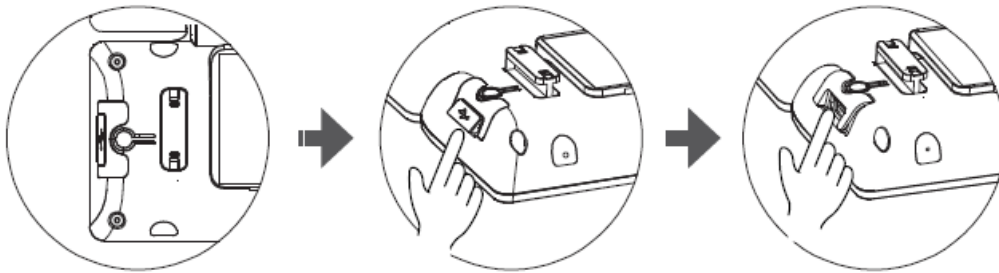
## Connecting the Snom D8C to a Snom phone

You can connect up to three Snom D8Cs to one of the supported Snom phones. Normally, the first expansion module is supplied with power by the phone via the USB connection. The second module is supplied with power by one of the separately available power adapters. The third expansion module is supplied with power by the

second module via the third module's USB plug.

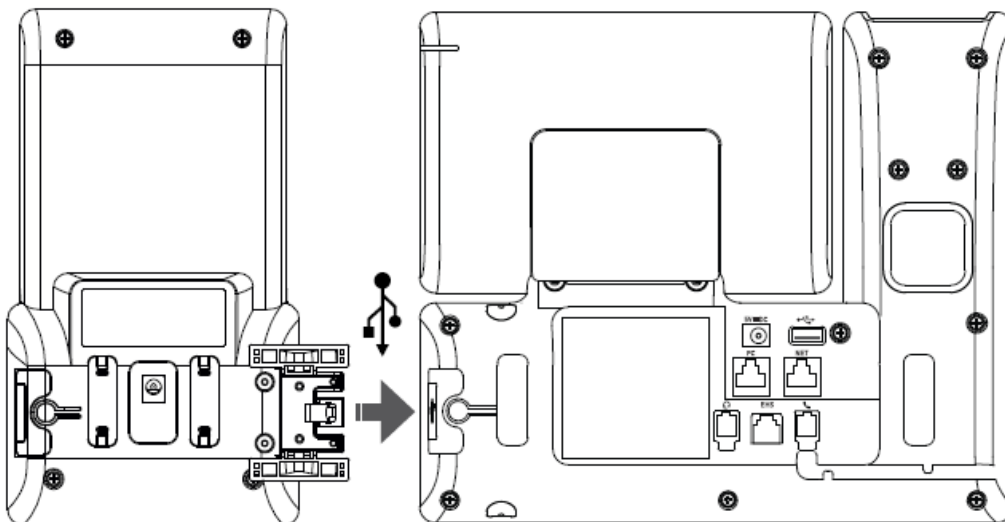
**Note:** In some cases, e.g. if you connect a device requiring a lot of power, such as a speakerphone or conferencing device, to the USB port of the D8C, you may also need to attach a power adapter to the third and the first module in the daisy-chain.

1. Place a soft cloth on the desktop so that the display does not get scratched or otherwise damaged if you lay the device down.
2. Attach the respective footstand to the D8C expansion module and to the phone.
3. Remove the rubber cover from the phone's USB port and the plastic cover around the USB port (Fig. 1).



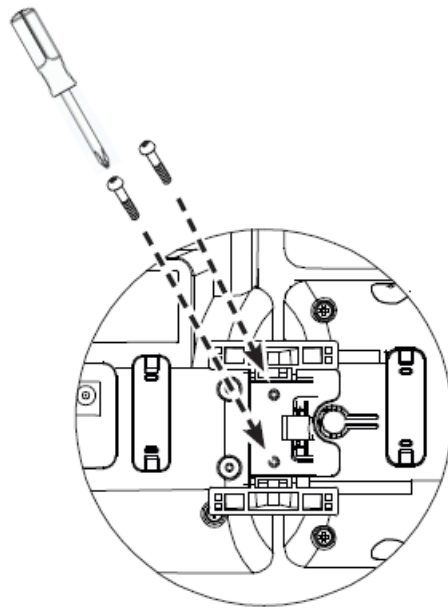
*Fig. 1*

4. Connect the expansion module to the phone, as shown in Fig. 2. Insert the two prongs on the connector plate of the D8C into the square holes on the phone and the USB plug into the phone's USB port (Fig. 2).



*Fig. 2*


5. Secure the connector plate to the phone with the two screws that came with the product (Fig. 3). (Phillips screwdriver not included in the delivery.)

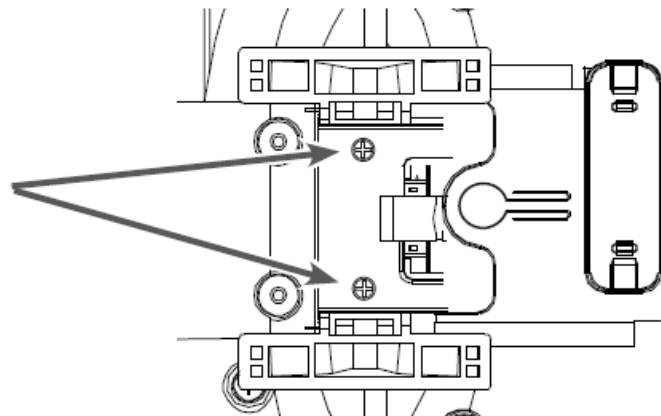


*Fig.3*

After the module has been connected to the phone, its LEDs will light up briefly, then turn off, indicating that the function keys are now ready for use.

### **Detaching the D8C**

1. Remove the two screws.
2. Press  to release the connection and slowly pull the USB plug from the USB port.



### **Connecting a second D8C**

1. Up to three expansion modules can be daisy-chained to one phone. Daisy-chain the modules first. Do not use a USB hub
2. Remove the rubber cover and the plastic cover from the USB port of the first expansion module and plug in the USB plug of the second module. Use the screws included in the delivery to securely attach the second module to the first one (Fig. 1).
3. Attach a power adapter (available separately) to the module and to a wall outlet before connecting the daisy-chain to the phone (Fig. 1).



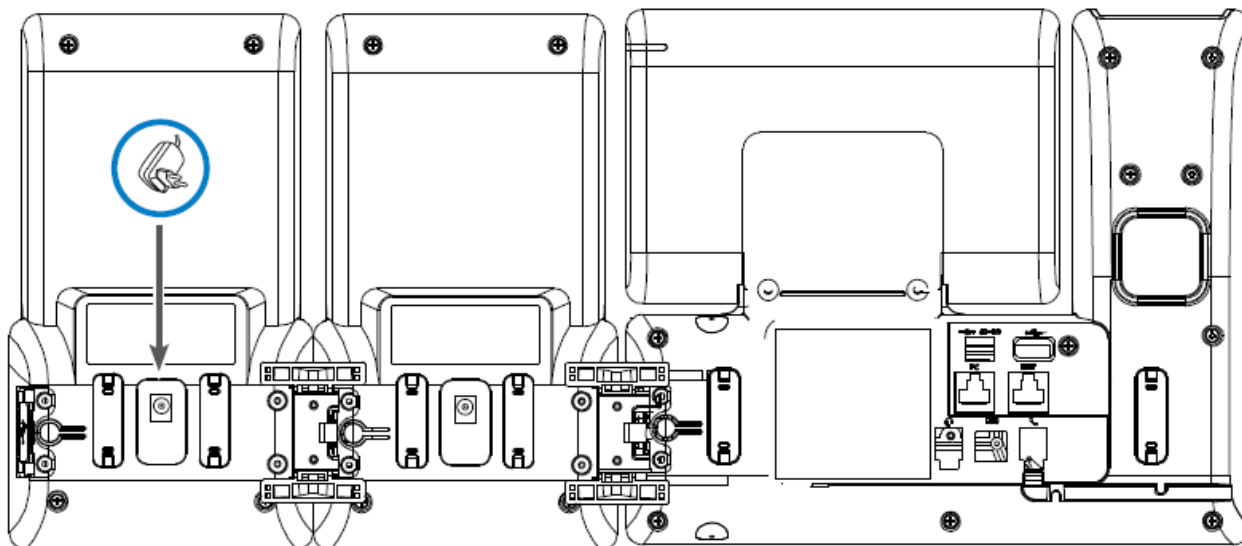


Fig. 1

4. The LEDs on the expansion modules will light up briefly, then turn off, indicating that the function keys are now ready for use.
5. **Important note:** Attach a power adapter (available separately) to the second module and to a wall outlet before connecting the daisy-chain to the phone or the second / second and third module to the D8C already connected to the phone (Fig. 10).
6. The LEDs on the expansion module will light up briefly, then turn off, indicating that the function keys are now ready for use.

### Connecting a third D8C

1. Remove the rubber cover and the plastic cover from the USB port of the second expansion module and plug in the USB plug of the third module. Use the screws included in the delivery to securely attach the third module to the second one (Fig. 2).

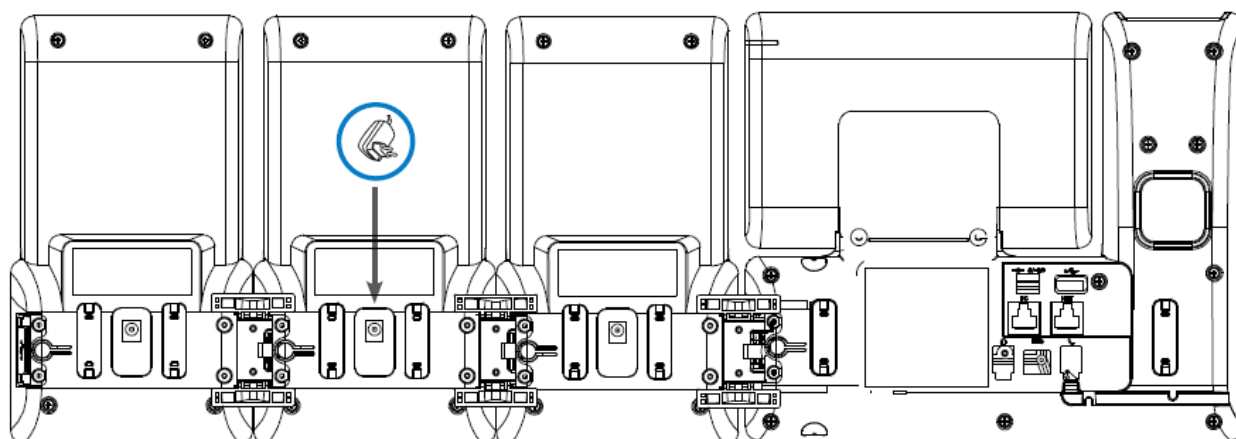


Fig. 2

2. The LEDs on the expansion module will light up briefly, then turn off, indicating that the function keys are now ready for use.

**Note:** If you connect a device requiring a lot of power, such as a speakerphone or conferencing device, to the third module, it may also need its own power adapter.

### Connecting a wireless headset

- On phones with a single USB port, the USB port on the expansion module can be used to connect a wireless headset via its USB adapter. If two or three expansion modules are daisy-chained, insert the USB adapter of the wireless headset into the USB port on the last module in the chain,
- If the Snom phone has two USB ports, the USB adapter of the wireless headset can be inserted into the USB port on the expansion module or into the free USB port on the phone.

## Getting to know your D8C

The function keys on the expansion module(s) are configured and work like function keys/Smart Label keys with LEDs on the phone itself. The settings are stored on the phone and will remain stored there when the expansion module is disconnected; if the expansion module is replaced by another module, the settings will be used by that module. For more information on the available functions and on how to program and use the keys, please refer to the phone's manual, chapter "Programming the Function Keys". You can download the manual at <https://service.snom.com> -> Desk Phones.

## Display layout

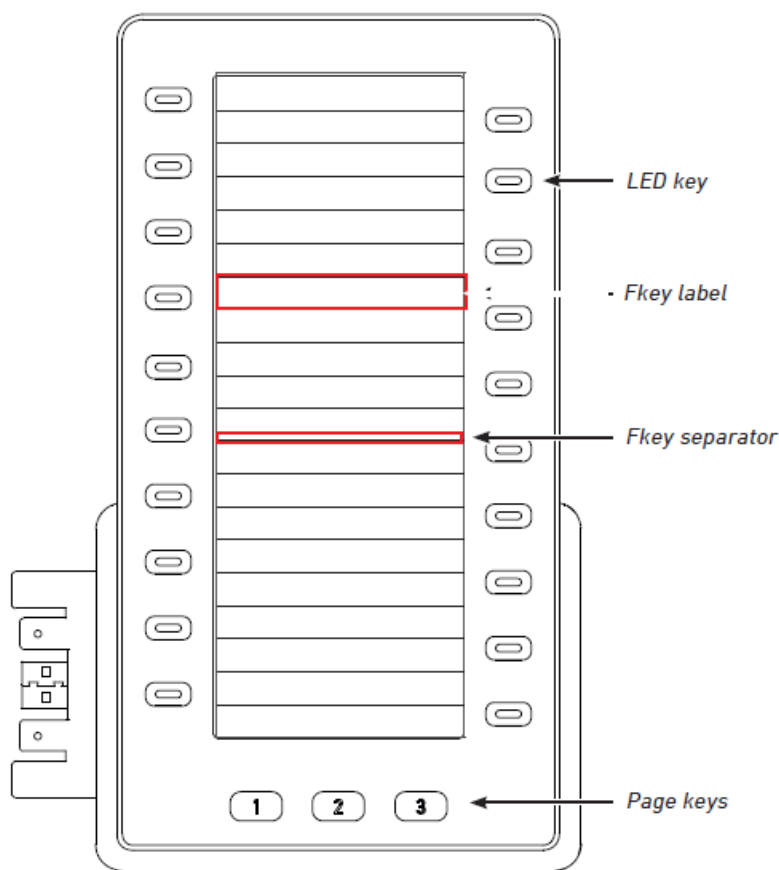


Fig. 1

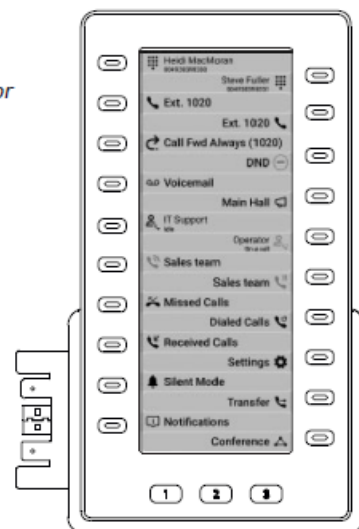



Fig. 2

The module has 20 keys with LEDs  (60 function keys on three "pages" with 20 function keys each) and three number keys with LEDs to select the function key pages. A field on the display screen is allocated to each key. The labels for the left row of keys are left-aligned, the labels for the right row are right-aligned (Fig. 2).

To use a function key, the page it is on must be onscreen. The glowing green LED on a page key indicates which page is onscreen. The blinking red LED on the page key of a page that is not on-screen indicates that there is a ringing call for an extension on that page.

## Smart Labels

In the default setting, icon and name of the function type are shown in the label area (Fig. 1 and 2, example 1).

- When no text has been entered in the Label field and the Number field is empty, the label area on the display shows the function type (example 1).
- When a text is entered in the Label field, it is displayed instead of the function type (example 2, 4, and 5).
- When a value is entered in the Number field and the Label field is empty, the value is added as a second line to the function type in the top line (example 3).
- If you want two lines of character strings to be displayed, for example a name and a phone number for an extension setting, enter them in the Label field with the <br> tag between them (example 5).

Expansion Module 1				
Page 1				
Context	Type	Number	Label	XML Label
Active	Extension			1
Active	Extension		Joe Miller	2
Active	Extension	1236@example.com		3
Active	Extension	1236@example.com	Joe Miller	4
Active	Extension	1236@example.com	Joe Miller 1236	5

Fig. 1



Fig. 2

**Note:** The label is a convenience for the user. It has no effect on the functioning of the key. Examples 1 and 2 are not valid extension settings because no Number value has been set.

Depending on the function mapped onto the key, its allocated display area will show the context information when the key event occurs or when the key is pressed; it will revert to the idle content when the key event has ended or when the key is pressed again.

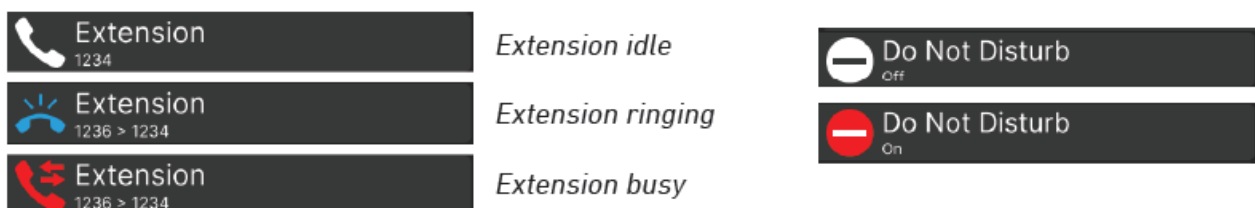


Fig. 3

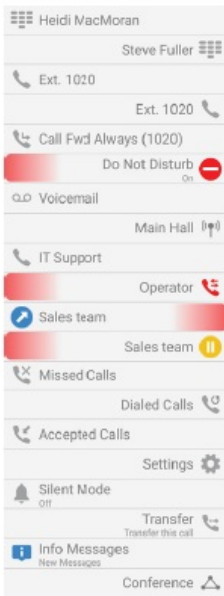
## Function key LEDs

Depending on the function mapped onto the key, the LEDs on the key will light up when the key event occurs or when the key is pressed; they will go out when the key event has ended or when the key is pressed again.

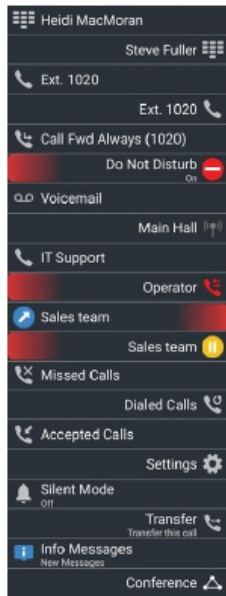
## Display appearance settings

The phone comes with four standard background themes (UI color themes) that are selected on the phone and on the phone's web interface (Fig. 1 to 5). The phone and all connected D8C's display the same theme. For the D81x series, the default is the "contrast" theme at Fig. 5. The color of label separators, text, and symbols is adjusted automatically for best readability on the background.

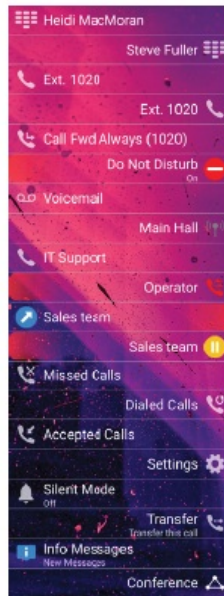
Per provisioning only, you can also specify the URL to a custom background image to be used instead. For custom backgrounds with a light background or a mixed background you may also need to set the industrial UI color theme to improve the readability of the text.



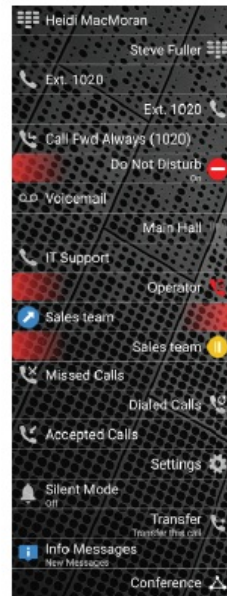
*Fig. 1-Light*



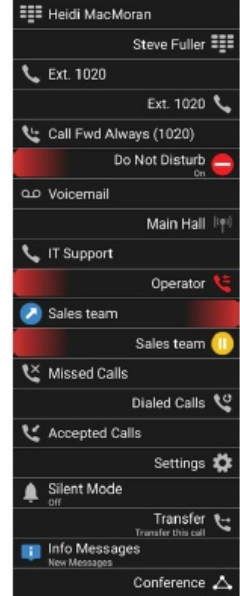
*Fig 2-Dark*



*Fig. 3-Colorful*



*Fig. 4-Industrial*




*Fig. 5-Contrast*


The intensity of the backlight can be adjusted separately for periods of activity and inactivity. When the device has been inactive for a specified number of seconds, it will automatically switch the backlight intensity to idle mode.

## Settings on the phone


### UI color theme

1. Open the Settings menu of the phone that the module is connected to.

2. Select Preferences and press .

3. Select Display and press .


4. Select Primary display and press .


5. Select Themes and press .

6. Select a theme and press  to save and return to the Primary display menu


## Backlight

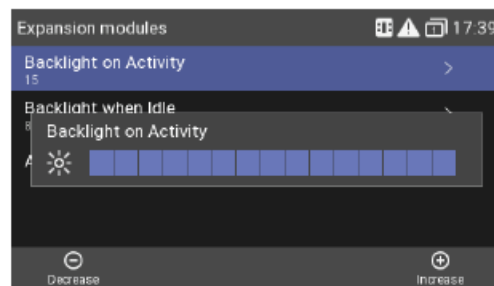
1. Open the Settings menu of the phone that the module is connected to.



2. Select Preferences and press .


3. Select Display and press .

4. Select Expansion Modules and press .

5. Select Backlight on activity or Backlight when idle and press .



6. Press the right or left arrow on the navigation key or the function key underneath  or  in the function key line to decrease or increase the backlight's intensity.

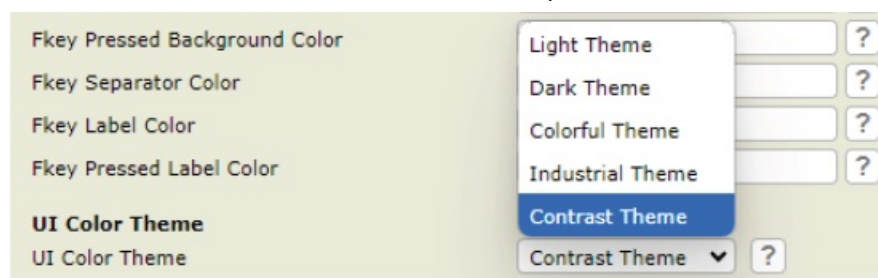
7. Press  to save and return to the Expansion Modules menu.

**Note:** The timer for returning the backlight to idle mode is set on the web interface

## Settings on the web interface

### UI color theme

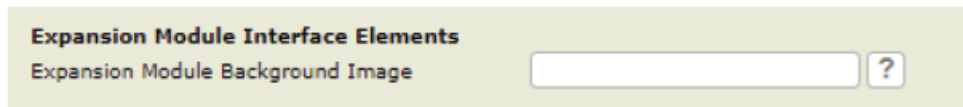
1. Open the web interface of the phone.
2. Click Preferences in the menu on the left side of the window.
3. Click the Appearance tab.
4. Scroll down to UI Color Theme and select a theme from the drop-down menu.



5. Click Apply and Save.

## Custom image

1. Open the web interface of the phone.
2. Click Preferences in the menu on the left side of the window.
3. Click the Appearance tab.
4. Scroll down to Expansion Module Interface Elements and enter the URL to a custom image. Image size must be 480 by 1280 pixels, and the file size should be below 2MB. If the image does not conform to these specifications, the current UI color theme will be instead used instead.



5. Click Apply and Save.

## Backlight

1. Open the web interface of the phone.
2. Click Preferences in the menu on the left side of the window.
3. Click the Display tab.



4. In the USB Expansion Module section, enter a value from 0 to 15 in the text fields of backlight on activity and backlight when idle., The defaults are 15 (highest intensity) for backlight on activity and 8 for backlight when idle. Enter 0 to turn the backlight off.
5. Enter a time period in seconds in the text field of Dim after (s). Valid values are integers from 1 to 2147483647. The default is 20 seconds.
6. Click Apply and Save.

## Configuring the function keys

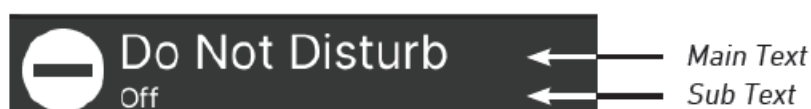
The function keys on the expansion module are configured and work like the Smart Label keys with LEDs on the phone. The settings are stored on the connected phone and remain stored there when the expansion module is disconnected. They are not shown in the phone's settings when no expansion module is connected. If the expansion module is replaced by another module, the settings will be used by that module.



The keys on the D8C are freely programmable function keys. See the phone's manual, chapter Configuring the function keys, for the description of the settings and how to configure them. You can download the manual at <https://service.snom.com> +.

## Configuration on the phone











### Font size and text alignment

The font size of the upper (Main Text) and lower (Sub Text) text lines can be adjusted separately.



1. Open the Settings menu of the phone that the module is connected to.
2. Open the Preferences menu.
3. Open the Display menu.
4. Open the Expansion Modules menu.
5. Open Appearance.
6. Select the UXMC expansion module.
7. Select the font size for the top line (Main text size) and the bottom line (Subtext size) and press  The defaults are XL and S, respectively.
8. Open Text alignment.
9. Select the text alignment and press  . The default is left-aligned.
10. Press X for 3 seconds to return to the idle screen.

### Function settings

1. Open the Settings menu of the phone that the module is connected to.
2. Open the Preferences menu.
3. Open the Function keys menu.
4. Select Expansion keys.
5. Open Font size.
6. Select Expansion Keys # Page 1, 2, or 3, respectively, by scrolling to the respective page and pressing .
7. Select a key and press  to open the Key # Function menu. The selected key flashes yellow if the Smart Label key page with the key to be configured is on-screen. Press the respective page button (1, 2, or 3) on the D8C to display the page.
8. The default for Context is Active, i.e., all configured identities whose status is “active”.
  - If you want to restrict the functionality to a configured identity, select Context and press .
  - Select the identity from the menu and press  . The following prompts depend on the selected functionality.
9. Select Type and press  . Use  /  / to scroll to a functionality on the list and press  The information you will then be prompted to enter depends on the selected functionality.
10. In our example, the functionality is Extension. Press  to select and return to the Key # function menu where Number has been added to the menu below “Type”.
11. Select Number and press .



12. Enter the extension number and press



13. The Label is optional. See “SmartLabels” on page 13 for more information. Enter a name or other descriptive

text and press



or



press without entering data to save.

14. Press briefly to return to the Key # Function menu; press X for 3 seconds to return to the idle screen.

## Configuration on the web interface

### Font size and text alignment

1. Open the web interface of the phone.
2. Click Preferences in the menu on the left side of the window.
3. Click the Appearances tab.
4. Scroll down to Expansion Module Font Options and select font size and text alignment from the respective drop-down menus. The defaults are XL for Main Text and S for Sub Text size, and left-aligned for the text alignment.
- 5.

Expansion Module Font Options		
Expansion Module Maintext Size	XL ▼	?
Expansion Module Subtext Size	S ▼	?
Expansion Module Text Alignment	Left ▼	?

Click Apply and Save.

### Function settings

1. Open the web interface of the phone.
2. Click Function keys in the menu on the left side of the window. The keys on the three pages of each module are numbered consecutively from 1–60 on each module:
  - Page 1: 1–20
  - Page 2: 21–40
  - Page 3: 41–60



Expansion Module 1

Context	Type	Page 1 Number	Label	XML Label
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	1
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	2
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	3

Page 2

Context	Type	Number	Label	XML Label
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	21
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	22
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	23

Page 3

Context	Type	Number	Label	XML Label
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	41
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	42
Active ▼	Line ▼	<input type="text"/>	<input type="text"/>	43

3. Click the Key Assignment tab, if necessary.
4. Scroll down to Expansion Keys and the expansion module you want to configure.
5. Under Context of the key you want to configure, select “Active” or one of the configured identities from the drop-down list. The default is “Active”, i.e., the configured key is available for all configured identities on the phone.
6. Under Type, select “Extension” from the drop-down list.
7. In the Number text field, enter the phone number whose calls you want to monitor and pick up.
8. **Optional:** In the Label text field, enter a name or descriptive text. See “Smart Labels” on page 13 for more information.
9. Click Apply and Save.

### XML provisioning of settings

The XML tags of the function keys are an exception from the general rules for XML mass provisioning of settings for Snom phones because the tag for each key specifies the exact settings for that particular key. The format is as follows

```
<fkey idx="n" context="active" label="x" default_text="$name $state" perm="">argument</fkey>
```

### Example

```
<fkey idx="33" context="active" short_label_mode="text" short_label="" short_default_text="!!$(:)!!$(generate_via_conditional_label_short)" label_mode="icon_text" icon_type="" reg_label_mode="icon_text" label="" lp="on" default_text="!!$(:)!!$(generate_via_conditional_label_full)" perm="" c="1" csim="1" clm="1">dest &lt;sip:14147356@192.168.10.60;user=phone&gt</fkey>
```

For more information on function key types, see <https://service.snom.com/display/wiki/Function+Key+Types> .  
For more information on valid values and defaults, see the individual settings at <https://service.snom.com/display/wiki/Settings> .

- Parameter fkey idx. The unique identifier of the function key when connected to a particular phone model.

**NOTE:** The fkey idx of a particular key depends on the number of function keys on the phone, the number of expansion modules connected to the phone, and the position of the module in the daisy chain. For your convenience, we have prepared a table of the numbering system; please see “Function key numbering system” on page 22.

- Parameter context. This setting specifies the identity (account) that can use the key. The default is Identity 1.


Valid settings:

- All active identities (accounts) registered on the phone: Setting “active”.
- One identity specified by its number. Example: Setting “1” for Identity 1.

Parameter label. The label (name, etc.) to be shown on the expansion Function Keys page of the phone's web interface this is the string entered in the text field of Label. See “SmartLabels” on page 13.

Examples for an extension setting.

- label=“Joe Miller” displays  Joe Miller

- label=“Joe Miller<br>1236” displays two lines:  Joe Miller  
1236

- Parameter default\_text. Optional attribute that can be any string. When the parameter label is not set for a key, the value of default\_text will be displayed as the key's label on the display of the D8C (see “Display layout” on page 12). You can define an arbitrary fixed text or use \$name, \$state, and \$type to insert dynamic information.

The default value is “\$name \$state”.

- **\$name:** Inserts the label or, if label is not set, the extension/phone number supplied as the key's argument.
- **\$state:** Inserts the key's state (free, busy, etc.) when functions like line or extension are mapped onto the key.
- **\$type:** Inserts the key type.
- Parameter perm. Valid values are:
  - perm=“!”: The settings of the key can be changed by mass provisioning, but only if the end user has not made changes to the configuration on the phone itself or on its web interface.
  - perm=“&”, perm=“R”, perm=“ ”: The settings of the key are Read Only and cannot be changed by the end user.
  - perm=“\$”, perm=“RW”, perm=“ ”: The settings of the key can be changed by mass provisioning; any end user configurations will be overwritten on reboot.
- Argument.
  - The default is line. Example:  
`<fkey idx="19" context="1" label="" default_text="$name $state" perm="">line</fkey>`
  - Examples for other functions:

**NOTE:** These settings depend on the requirements of the PBX.

    - **Extension:** `<fkey idx="19" context="1" label="Mary" default_text="$name $state" perm="">dest sip: 123@example.com ;user=phone</fkey>`
    - **Speed dial**  
`<fkey idx="20" context="1" label="Mary/cell" default_text="$name $state" perm="">speed 9175550240</fkey>`
    - **Multicast:** `<fkey idx="21" context="1" label="Announcements 2nd floor" default_text="$name $state" perm="">multicast 239.255.255.232:5555</fkey>`
    - **Intercom:** `<fkey idx="22" context="1" label="Intercom Mary" default_text="$name $state" perm="">icom`

sip:[123@example.com](tel:123@example.com);user=phone</fkey>

- **Forwarding all incoming calls:** <fkey idx="23" context="1" label="Fwd all to Mary" default\_text="\$name \$state" perm="">redirect sip: [123@example.com](tel:123@example.com) ;user=phone</fkey>
- **Transferring call:** <fkey idx="24" context="1" label="Transfer" default\_text="\$name \$state" perm="">transfer</fkey>

## Function key numbering system

### Definitions

- **fkey idx:** XML mass provisioning
- **PUI:** Phone user interface. Select the page on the D8C, longpress a key to open its edit window on the connected phone's display, and press Edit.
- **WUI:** Web user interface/phone manager (Function Keys page). The keys on the three pages of each module are numbered consecutively on each module:
  - Page 1: P1–P20
  - Page 2: P21–P40
  - Page 3: P41–P60

### D815

- SmartLabel keys on phone: fkey idx 0–39, PUI fkey number 1–40
  - Page 1: fkey idx 0–9  
PUI 1–10  
WUI P1–P10
  - Page 2: fkey idx 10–19  
PUI 11–20  
WUI P11–P20
  - Page 3: fkey idx 20–29  
PUI 21–30  
WUI P21–P30
  - Page 4: fkey idx 30–39  
PUI 31–40  
WUI P31–P40

- D8C expansion module 1

Page 1	fkey idx	40–59	PUI	41–60	WUI	P1–P20
Page 2	fkey idx	60–79	PUI	61–80	WUI	P21–P40
Page 3	fkey idx	80–99	PUI	81–100	WUI	P41–P60

- D8C expansion module 2
-

Page 1	fkey idx	100–119	PUI	101–120	WUI	P1–P20
Page 2	fkey idx	120–139	PUI	121–140	WUI	P21–P40
Page 3	fkey idx	140–159	PUI	141–160	WUI	P41–P60

- D8C expansion module 3

Page 1	fkey idx	160–179	PUI	161–180	WUI	P1–P20
Page 2	fkey idx	180–199	PUI	181–200	WUI	P21–P40
Page 3	fkey idx	200–219	PUI	201–220	WUI	P41–P60

## D812

- SmartLabel keys on phone: fkey idx 0–31, PUI fkey number 1–32
  - Page 1: fkey idx 0–7  
PUI 1–8  
WUI P1–P8
  - Page 2: fkey idx 8–15  
PUI 9–16  
WUI P9–P16
  - Page 3: fkey idx 16–23  
PUI 17–24  
WUI P17–P24
  - Page 4: fkey idx 24–31  
PUI 25–32  
WUI P25–P32
- D8C expansion module 1

Page 1	fkey idx	32–51	PUI	33–52	WUI	P1–P20
Page 2	fkey idx	52–71	PUI	53–72	WUI	P21–P40
Page 3	fkey idx	72–91	PUI	73–92	WUI	P41–P60

- D8C expansion module 2

Page 1	fkey idx	92–111	PUI	93–112	WUI	P1–P20
Page 2	fkey idx	112–131	PUI	113–132	WUI	P21–P40
Page 3	fkey idx	132–151	PUI	133–152	WUI	P41–P60

- D8C expansion module 3

Page 1	fkey idx	152–171	PUI	153–172	WUI	P1–P20
Page 2	fkey idx	172–191	PUI	173–192	WUI	P21–P40
Page 3	fkey idx	192–211	PUI	193–212	WUI	P41–P60

## D810

- SmartLabel keys on phone: fkey idx 0–15, PUI fkey number 1–16

- Page 1: fkey idx 0–3

PUI 1–4

WUI P1–P4

- Page 2: fkey idx 4–7

PUI 5–8

WUI P5–P8

- Page 3: fkey idx 8–11

PUI 9–12

WUI P9–P12

- Page 4: fkey idx 12–15

PUI 13–16

WUI P13–P16

- D8C expansion module 1

Page 1	fkey idx	16–35	PUI	17–36	WUI	P1–P20
Page 2	fkey idx	36–55	PUI	37–56	WUI	P21–P40
Page 3	fkey idx	56–75	PUI	57–76	WUI	P41–P60

- D8C expansion module 2

Page 1	fkey idx	76–95	PUI	77–96	WUI	P1–P20
Page 2	fkey idx	96–115	PUI	97–116	WUI	P21–P40
Page 3	fkey idx	116–135	PUI	117–136	WUI	P41–P60

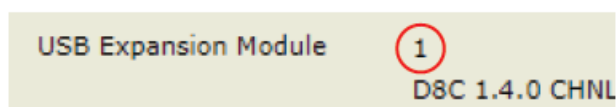
- D8C expansion module 3

Page 1	fkey idx	136–155	PUI	137–156	WUI	P1–P20
Page 2	fkey idx	156–175	PUI	157–176	WUI	P21–P40
Page 3	fkey idx	176–195	PUI	177–196	WUI	P41–P60

## Firmware update

### Manual update via the phone's web interface

- The phone must be running firmware 10.1.173.0 or higher.
  - The name of the update's file must have the format snomD8C-<version>-r.bin.
  - The file must be located on a server that can be reached by your phone.
  - Update the expansion modules one at a time.
  - Before the update, disconnect other modules from the phone.
1. Connect the expansion module you want to update to your phone. Wait until its LEDs have lit up and gone out and the labels are shown on the display.
  2. Open the phone's web user interface.
  3. Click System Information in the menu on the left side of the window, and confirm that the number of the USB expansion module is 1.

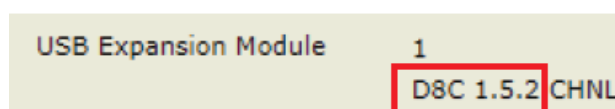


4. Click Software Update in the menu on the left side of the window.
5. Enter the HTTP URL to the update file into the Firmware text field of the Manual Expansion Module Software Update section and click Load.



The progress of the update is shown on the phone's display. When it is finished, phone and expansion module will reboot.

6. After the reboot, click System Information again to check whether the new firmware version is displayed in the line below the module number.



## Update via provisioning

- The phone must be running firmware 10.1.173.0 or higher.
- The name of the update file's name must have the format snomD8C-<version>-r.bin. An example for the expansion module firmware syntax can be found at <https://service.snom.com/display/wiki/Firmware+Update+XML+Settings>.
- The file must be located on a server that can be reached by your phone.
- The phone's update policy settings must be auto\_update (update automatically) or ask\_for\_update (ask for update, i.e., the user receives a prompt to confirm the update).
- Update the expansion modules one at a time.
- Before the update, disconnect other modules from the phone.

**Note:** After an update via provisioning, the firmware\_uxm parameter is set to the phone's URL to keep the phone from repeatedly downloading the update file and updating the expansion module. If you are provisioning updates for more than one D8C from the same phone, you must replace the phone's URL in the firmware\_uxm parameter with the update file's URL before updating the next module.

1. Connect the expansion module you want to update to your phone. Wait until its LEDs have lit up and gone out

and the labels are shown on the display.

2. Set the `firmware_status` setting to the update file's HTTP URL. The progress of the update is shown on the phone's display. When the update has been completed, phone and expansion module will reboot.
3. Repeat for each module to be updated.

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
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## Documents / Resources

 <p>snom</p> <p>User Manual D8C Expansion Module When used with a Snom D210 phone v1.02</p>	<p><a href="#">snom D81x Expansion Module</a> [pdf] User Manual D81x Expansion Module, D81x, Expansion Module, Module</p>
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References

- [🔗 Snom Service Hub - Snom Service Hub - Snom Confluence](#)
- [🔗 Snom Service Hub - Snom Service Hub - Snom Confluence](#)
- [🔗 Firmware Update XML Settings - Snom Service Hub - Snom Confluence](#)
- [🔗 Settings - Snom Service Hub - Snom Confluence](#)
- [User Manual](#)

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