



Configuring LED Patterns

The default LED pattern for the phone differs for different call control modes.

The table shows the default LED pattern for the SPA phones in SIP mode:

| Description | LED Location | LED Pattern |
|--|--------------|---|
| Voice mail | MWI | Red |
| No voice mail | MWI | Off |
| Temporary Ethernet link lost | Mute | Fast blink amber |
| Permanent Ethernet link lost | Mute | Solid amber |
| Registration failed | Line | Slow blink amber |
| Line disabled | Line | Off |
| Idle | Line | Solid green |
| Local Seize | Line | Solid red |
| Local Ringing | Line/MWI | Fast blink red |
| Local Held | Line | Slow blink red |
| Offhook/Proceeding | Line | Solid red |
| Connected/Local active | Line | Solid red |
| Shared line remote active call back mode | Line | Slow blink green |
| MuteOn | Mute | Solid red |
| Mute Off | Mute | Off |
| Remote undefined | Line | Solid red |
| Remote Seize | Line | Solid Red |
| Remote Ringing | Line | Fast blink red |
| Remote Held | Line | Slow blink green |
| Remote Active | Line | Heart-beat blink red |
| Trunk no serv | Line | Phone booth/SPA9000 feature. Applies when the phone is connected to the UC320 PBX |

| Description | LED Location | LED Pattern |
|---------------------------|--------------|---|
| Trunk in use | Line | Phone booth/SPA9000 feature. Applies when the phone is connected to the UC320 PBX |
| Trunk Reserved LED | Line | Phone booth/SPA9000 feature. Applies when the phone is connected to the UC320 PBX |
| Application LED | Line/SC | Solid Green |
| Serv Subscribe Failed LED | Line/SC | Solid amber |
| Serv Subscribing LED | Line/SC | Slow blink amber |
| SNRM Day Mode LED | Line/SC | Solid green |
| SNRM Night Mode LED | Line/SC | Solid red |
| Parking Lot Busy LED | Line/SC | Solid red |
| BLF Idle LED | Line/SC | Solid green |
| BLF Ringing LED | Line/SC | Fast blink red |
| BLF Busy LED | Line/SC | Solid red |
| BLF Held LED | Line/SC | Slow blink red |

**Note**

Sidecar (SC) LED button is the LED button on the Attendant Console.

The table shows the MWI LED pattern for the SPA301 phone in SIP mode:

| Description | LED Pattern |
|--|------------------------|
| Temporary Ethernet link lost | Heart-beat blink red |
| Permanent Ethernet link lost (resulting in a reboot when link is detected again)) amber | Heart-beat blink amber |
| Firmware downloading | Slow blink amber |
| Firmware upgrading | Fast blink amber |
| Phone registration failed | Solid amber |
| Call on hold | Slow blink red |
| No response to a paging message | Fast blink green |

The table shows the MWI LED pattern for SPA IP phones in SCCP mode:

| Description | LED Pattern |
|------------------------|------------------|
| Incoming call | Fast blink amber |
| Call on hold | Slow blink green |
| Call active (off-hook) | Solid green |

The table shows the MWI LED pattern/status indicator for the SPA301 phone in SCCP mode:

| Description | LED Pattern |
|--|------------------------|
| Temporary Ethernet link lost | Heart-beat blink red |
| Permanent Ethernet link lost (resulting in a reboot when link is detected again) | Heart-beat blink amber |
| Firmware downloading | Slow blink amber |
| Firmware upgrading | Fast blink amber |
| Incoming call | Fast blink red |
| Incoming page call | Fast blink green |
| Call holding | Slow blink green |
| Call active (off-hook) | Solid green |
| Message waiting | Solid red |

LED patterns can be customized for the line keys and attended console keys.

To configure Line Key LED patterns:

Step 1 Click **Admin Login > advanced > Voice > Phone**

Step 2 Under **Line Key LED Pattern**, configure the parameters to customize the Line Key LED patterns with the LED script described in the following table:

| Parameters | Description |
|---|---|
| Idle LED | The line is idle. |
| Remote Undefined LED | The Remote Undefined state pattern, where the shared call state is undefined (the phone is still waiting for the state information from the application server). Not applicable if the call appearance is not shared. Leaving this entry blank indicates the default value. |
| Local Seized LED | This phone seized the call appearance in preparation for a new outbound call. |
| Remote Seized LED (applicable only to shared call appearance) | The shared call appearance was seized by another phone. |

| Parameters | Description |
|--|--|
| Local Progressing LED | This phone attempts an outgoing call on this call appearance (the called number is ringing). |
| Remote Progressing LED (applicable only to shared call appearance) | Another phone attempts an outbound call on this shared call appearance. |
| Local Ringing LED | The call appearance is ringing. |
| Remote Ringing LED (applicable only to shared call appearance) | The shared call appearance is in ringing on another phone. |
| Local Active LED | The call appearance is engaged in an active call. |
| Remote Active LED (applicable only to shared call appearance) | Another phone is engaged in an active call on this shared call appearance. |
| Local Held LED | The call appearance is held by this phone. |
| Remote Held LED (applicable only to shared call appearance) | Another phone placed this call appearance on hold. |
| Register Failed LED | The corresponding extension has failed to register with the proxy server. Leaving this entry blank indicates the default value. |
| Disabled LED | Call Appearance is disabled (not available for any incoming or outgoing call). Leaving this entry blank indicates the default value. |
| Registering LED | The corresponding extension tries to register with the proxy server. Defaults to blank. |
| Call Back Active LED | Call Back operation is currently active on this call. Defaults to blank. |

Step 3 Click **Submit All Changes**.

To configure Attendant Console LED patterns see [Attendant Key LED Patterns, page A-82](#).

LED Script

The LED script describes the color and blinking pattern of a Line Key LED. Each script contains a number of fields separated by a semicolon(;). White spaces are ignored. Each field has the syntax `<field-name> = <field-value>`. The allowed *field-name* and corresponding *field-values* are listed below:

```
c=o|r|g|a
```

This field sets the **color** of the LED. The 4 choices are:

- o = off
- r = red
- g = green
- a = amber (orange)

```
p=n[b] | s[b] | f[b] | u[d]
```

This field sets the blinking **pattern** of the LED. The 4 choices are:

- nb = no blink (steady on or off)
- sb = slow blink (1s on and 1s off)
- fb = fast blink (100ms on and 100ms off)
- ud = user-defined (according to the contents of the u field)

```
u=on/off/on/off/etc.
```

This is a user-defined blinking pattern used only when p = ud. It consists of up to 4 pairs of on/off duration in seconds with up to 2 decimal places; each value is separated by a forward slash (/).

LED Script Examples

```
c=r;p=sb
```

Color is red and pattern is slow blink.

```
c=o
```

LED is off.

```
c=g
```

Color is green and pattern is steady on (default).

```
c=a;p=ud;u=.1/.1/.1/.1/.1/.9
```

Color is amber (orange) and the blink pattern is: 100ms on, 100ms off, 100ms on, 100ms off, 100ms on, 900ms off.

