

Grandstream Networks, Inc.

GRP Series - BLF Guide



Busy Lamp Field (BLF) feature allows an end user, such as attendant, to monitor the hook status of a list of users. GRP26XX supports Busy Lamp Field (BLF) on the Virtual Multi-Purpose Keys and Multi-Purpose Keys of the phone. This document serves as an end user guide on how to configure Grandstream GRP Carrier-Grade IP Phones for Busy Lamp Field feature.

OVERVIEW OF FUNCTIONS

Grandstream GRP Carrier-Grade IP Phones supports Busy Lamp Filed (BLF) feature. GRP26XX supports this feature by changing the color and status of the MPK indicators, associated with the monitored users, as well as by changing the LED keys color and status on the MPKs on phone body. Additionally, the phone system is also able to pick up the calls to the monitored extensions.

BLF KEYS CONFIGURATION ON THE GRP261X/GRP2624/GRP2634 SERIES

BLF Configuration Using Virtual Multi-Purpose Keys

Users can proceed as follows in order to configure the BLF feature on GRP261X/GRP2624/GRP2634 phones:

1. On the Web UI, click on **Programmable Keys**;
2. Go to **Virtual Multi-Purpose Keys** as the figure shows below:

Virtual Multi-Purpose Keys

◆ If there is an account with no Default or Shared mode VPKs configured to it, then the account will not show up on the screen.
◆ An account can only be configured with either Default mode VPKs or Shared mode VPKs. If there are Default mode and Shared mode VPKs configured to the same account, please configure carefully. [Click to get more help](#)

Order	Mode	Account	Value	Label	Locked
1	Line	Account 1	1005		<input type="checkbox"/> 🔄 🟢
2	Line	Account 2			<input type="checkbox"/> 🟢 🟢
3	Line	Account 3			<input type="checkbox"/> 🟢 🟢
4	Line	Account 4			<input type="checkbox"/> 🟢 🟢
5	Line	Account 5			<input type="checkbox"/> 🟢 🟢
6	Line	Account 6			<input type="checkbox"/> 🟢 🟡

[Add](#) [Save](#) [Reset](#)

Virtual Multi-Purpose Keys Settings

4. On the Virtual Multi-Purpose Keys page. Select **Busy Lamp Field (BLF)** from the **Mode** drop-down list, and choose the account associated with the IP PBX that carries the extension being Set up.

Order	Mode	Account	Value	Label	Locked
1	Line	Account 1	1005		<input type="checkbox"/>
2	Line	Account 2			<input type="checkbox"/>
3	Line	Account 3			<input type="checkbox"/>
4	Line	Account 4			<input type="checkbox"/>
5	Line	Account 5			<input type="checkbox"/>
6	Line	Account 6			<input type="checkbox"/>

Configuring Virtual Multi-Purpose Keys

5. In the **Label** field, type the name of the individual or department that you want to associate with the extension being set up.
6. In the **Value** field, type the extension number for the monitored extension;

Order	Mode	Account	Value	Label	Locked
1	Busy Lamp Field (...)	Account 1	* 1000	John	<input type="checkbox"/>
2	Busy Lamp Field (...)	Account 1	* 1001	Bob	<input type="checkbox"/>
3	Busy Lamp Field (...)	Account 1	* 1002	Sales	<input type="checkbox"/>
4	Busy Lamp Field (...)	Account 4	* 1003	Support	<input type="checkbox"/>
5	Busy Lamp Field (...)	Account 2	* 1004	Jane	<input type="checkbox"/>
6	Busy Lamp Field (...)	Account 5	* 1005	Jack	<input type="checkbox"/>

Configuring Busy Lamp Field Extensions using Virtual Multi-Purpose Keys

7. Go to the bottom of the page and click on **Save**.

Dynamic VPKs

If users would like to configure more VPKs than the ones displayed on the page to perform BLF, they can click on the **Add** button at the bottom of the page to configure dynamic VPK.

BLF Configuration Using Multi-Purpose Keys (GRP2614, GRP2616, GRP2634, GRP2636 Only)

In order to set up BLF using Multi-Purpose Keys, please follow the steps mentioned below :

1. Go to **Programmable Keys** on the Web UI.
2. Click on **Multi-Purpose Keys** to access the page shown in the following screenshot :

Order	Mode	Account	Value	Label
1	None			
2	None			
3	None			
4	None			
5	None			
6	None			
7	None			

Preview
MPK Description Priority: Label -> Value -> Mode

1	None	None	5
2	None	None	6
3	None	None	7
4	None	None	8

< 1 2 3 >

Multi-Purpose Keys Settings

3. Select the **Busy Lamp Field (BLF)** option from the **Mode** drop-down list and choose the monitoring account under **Account**.

4. Enter the monitored extension in the **Value** field, and type the name of the individual or department in **Label**.

Order	Mode	Account	Value	Label
1	Busy Lamp Field (...)	Account 1	*1000	John
2	Busy Lamp Field (...)	Account 1	*1001	Bob
3	Busy Lamp Field (...)	Account 1	*1002	Sales
4	Busy Lamp Field (...)	Account 1	*1003	Support
5	Busy Lamp Field (...)	Account 1	*1004	Jane
6	Presence Watcher	Account 1	*1005	Jack
7	DND			

Preview
MPK Description Priority: Label -> Value -> Mode

1	John	Jane	5
2	Bob	Jack	6
3	Sales	DND	7
4	Support	Contacts	8

< 1 2 3 >

Configuring Busy Lamp Field Extensions using Multi-Purpose Keys

5. Go to the bottom of the page and click on **Save**.

BLF Configuration Using GBX20 Extension Module (GRP2615, GRP2624, GRP2650, GRP2670 Only)

For the GRP2615, GRP2624, GRP2650, GRP2670, users can configure BLF using Extension Board Keys. Once the Extension Module is successfully connected, go to the phone's **WEB GUI → Programmable Keys → Extension Boards Keys**.

- Status
- Accounts
- Phone Settings
- Network Settings
- Programmable Keys**
- Virtual Multi-Purpose Keys
- Idle Screen Softkeys
- Call Screen Softkeys
- Extension Boards Keys**
- Advanced Settings
- System Settings
- Maintenance
- Application
- External Service

Extension Boards Keys

Extension 1 Keys Extension 2 Keys Extension 3 Keys Extension 4 Keys

Order	Mode	Account	Value	Label
1	None			
2	None			
3	None			
4	None			
5	None			
6	None			
7	None			
8	None			
9	None			

Extension Boards Keys Settings

To configure BLF on the Extension Keys, start by setting the Mode to **Busy Lamp Field (BLF)**, and then enter the **Value** (The extension to be monitored) and the **Label** (Description of the button). When done, scroll down to the bottom of the page and press on **Save**.

Order	Mode	Account	Value	Label
1	Busy Lamp Field (...)	Account 1	*1000	John
2	Busy Lamp Field (...)	Account 1	*1001	Bob
3	Busy Lamp Field (...)	Account 1	*1002	Sales
4	Busy Lamp Field (...)	Account 1	*1003	Support
5	Busy Lamp Field (...)	Account 1	*1004	Jane
6	Busy Lamp Field (...)	Account 1	*1005	Jake

Configuring Busy Lamp Field Extensions using Extension Board Keys

BLF KEYS CONFIGURATION ON THE GRP260X SERIES

BLF Configuration Using Virtual Multi-Purpose Keys

Users can configure BLF Keys on the GRP260x using Virtual Multi-Purpose keys (VPKs) from the phone's **WEB GUI** → **Programmable Keys** → **Virtual Multi-Purpose Keys**. The GRP260x supports up to 12 VPKs.

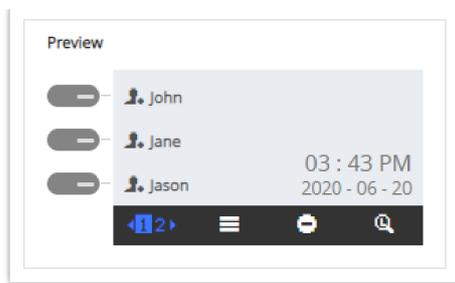
Order	Mode	Account	Value	Label	
1	Busy Lamp Field (...)	Account 1	+1006	John	⬆️ ⬆️
2	Busy Lamp Field (...)	Account 1	+1007	Jane	⬆️ ⬆️
3	Busy Lamp Field (...)	Account 1	+1008	Jason	⬆️ ⬆️
4	Busy Lamp Field (...)	Account 1	+1009	Jack	⬆️ ⬆️
5	Busy Lamp Field (...)	Account 1	+1010	Jonathan	⬆️ ⬆️
6	Busy Lamp Field (...)	Account 1	+1011	James	⬆️ ⬆️
7	Busy Lamp Field (...)	Account 1	+1012	Jordan	⬆️ ⬆️ ❌
8	Busy Lamp Field (...)	Account 1	+1013	Jena	⬆️ ⬆️ ❌

Add Save Reset

Configuring BLFs on GRP260x VPK page

In this section, The VPKs are listed by order (From 1 to 12), Users can configure BLF by setting the Mode to **Busy lamp field**, and then set the **Value** for the VPK (The extension to be monitored) and the **Label** (Description of the button). When done, scroll down and press on **Save** to save the configuration.

The Preview Section will show the label of each configured VPK in order:



VPK Preview

BLF Configuration using Multi-Purpose Keys (GRP2604 Only)

Using the GRP2604, Users can configure BLFs Multi-Purpose Keys (MPKs) from the phone's **WEB GUI → Programmable Keys → Multi-Purpose Keys**. The GRP2604 supports up to 10 MPKs.

Order	Mode	Account	Value	Label
1	Speed Dial	Account 1	* 1000	John
2	Busy Lamp Field (BLF)	Account 1	* 2000	Jack
3	Voicemail	Account 1	* 5555	VoiceMail
4	None	Account 1		
5	None	Account 1		
6	None	Account 1		
7	None	Account 1		
8	None	Account 1		
9	None	Account 1		

Preview

After saving, you can print the card style in the preview

MPKs Page

In this section, The MPKs are listed by order (From 1 to 10). Users can configure BLFs on an MPK by Setting the **Mode** to **Busy Lamp Field (BLF)** and then set the **Value** for the MPK (The extension to be monitored) and the **Label** (Description of the button). When done, scroll down and press on **Save** to save the configuration.

The Preview Section will show the label of each configured MPK in order:

Order	Mode	Account	Value	Label
1	Speed Dial	Account 1	* 1000	John
2	Busy Lamp Field (BLF)	Account 1	* 2000	Jack
3	Voicemail	Account 1	* 5555	VoiceMail
4	Speed Dial via Active...		* 1010	Carl
5	Transfer	Account 5	* 1001	Steve
6	Busy Lamp Field (BLF)	Account 1	* 1002	David
7	Speed Dial	Account 1	* 1002	Michael
8	Menu			Menu
9	Information			Infos
10	Forward	Account 1	* 1002	David

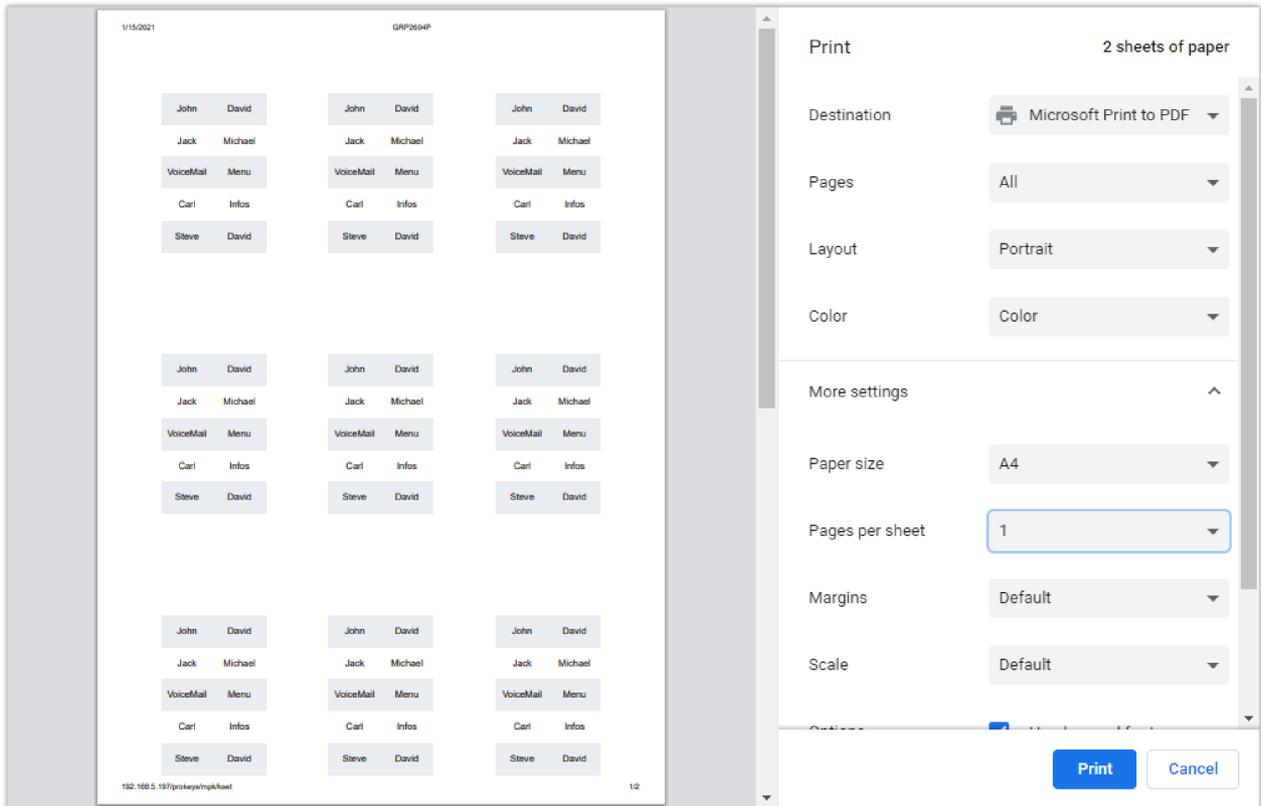
Preview

After saving, you can print the card style in the preview

MPK Preview

Printing and Installing the MPK Card on the GRP2604 phone

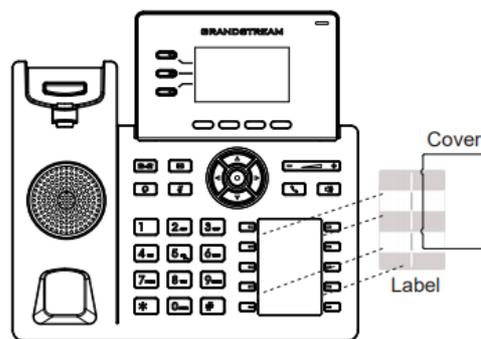
Users can print the card containing the configured MPK information including BLF keys by pressing on **Print** and then configure the printing options and preferences such as the Print Destination, print all pages or specific ones, Layout, Paper size, Margins, Scale, whether to display headers and footers and background colors ...



MPK Card printing options

The MPK card can be printed over the dedicated space on the **BLF label** (Which can be found in the GRP2604 package content) and then follow the steps below to install it on the phone:

1. Place the paper label in the groove of the phone.
2. Bend the plastic film so that the protruding points on the left and right sides snap into the grooves to complete the installation.
3. If you want to take it out, use a nail or thin card to move the slit on one side of the film to bend it and then take it out.



Installing the BLF paper

VISUAL INDICATORS

The phone system is able to notify the end user the hook status of the monitored extension by changing the LED colors.

For example, if the monitored extension is ringing, the BLF indicator status will be changed from solid green to blinking red; and if the monitored extension answers the call, the BLF indicator status will be changed from blinking red to solid red.

Monitored Extension Behavior	BLF LED Indicator Status
Idle	Solid Green
Placing a call	Solid Red
Ringing	Blinking Red
During a call	Solid Red
Call on Hold	Solid Red
Monitored extension not registered/Subscription failed	Off

DIRECTED CALL PICKUP

Directed call pickup feature allows GRP26xx phone system to be able to answer the calls to the monitored users. This feature is very useful for the attendant to help the specified callees to answer the call if the callees are not available to answer it.

When the monitored user's indicator is blinking red, that means there is an incoming call on this monitored extension phone, GRP26xx phones user should tap the "Busy Lamp Field" MPK button to answer the call for the monitored user.

To be able to answer incoming calls of the monitored extension, you will need to set "BLF Call-pickup" to "Force BLF Call-pickup by prefix" from the Phone's Web GUI under:

- Account x → Advanced Settings → BLF (Busy Lamp Field) → BLF Call-pickup

The screenshot displays the configuration interface for BLF (Busy Lamp Field). The settings are as follows:

- Presence Eventlist URI: [Empty text field]
- Eventlist BLF URI: [Empty text field]
- Auto Provision Eventlists: BLF Eventlist (dropdown menu)
- BLF Call-pickup: Force BLF Call-pickup by Prefix (dropdown menu)
- BLF Call-pickup Prefix: ** (text field)
- Call Pickup Barge-in Code: [Empty text field]
- PUBLISH for Presence:

Force BLF Call-pickup by prefix GRP26xx