Grandstream Networks, Inc.

GXP21xx/17xx/16xx IP phones

BLF Configuration User Guide

Table of Contents

INTRODUCTION **3**

OVERVIEW OF FUNCTIONS **4**

Configuration Via Web Browser 4
BLF Key Configurations 5
Visual Indicators 8
Directed Call Pickup 9

Table of Figures

Figure 1: Programmable Keys Settings 5
Figure 2: Configure Busy Lamp Field Key 6
Figure 3: Select Associated Account 7
Figure 4: Add Description 7
Figure 5: Add Extension Value 8
Figure 6: Save changes 8

Table of Tables

Table 1: Default Passwords for Login Page 5
Table 2: The BLF Indicators Status in Different Scenarios 9

INTRODUCTION

Busy Lamp Field (BLF) feature allows an end user, such as attendant, to monitor the hook status of a list of users. GXP21xx/17xx/16xx supports Busy Lamp Field (BLF) on the Multi-Purpose Keys and Virtual Multi-purpose keys on the phone. GXP2140 and GXP2170 are expandable with 1 to 4 expansion modules to support BLF feature. This document serves as an end user guide on how to configure Grandstream GXP21xx/17xx/16xx Enterprise IP phones for Busy Lamp Field feature.

Note: For GXP16xx series, only GXP1628 and GXP1630 support BLF configuration.

To learn more about GXP21xx/17xx/16xx's basic and advanced features, please visit link http://www.grandstream.com/support to download the latest "GXP21xx/17xx/16xx Administration Guide" and "GXP21xx/17xx/16xx User Guide".

OVERVIEW OF FUNCTIONS

Grandstream GXP21xx/17xx/16xx Enterprise IP Phone supports Busy Lamp Field (BLF) feature. GXP21xx/17xx/16xx supports this feature by changing the color and status of the MPK/VPK indicators, associated with the monitored users, on the mounted MPK extensions board or Programmable Keys on the phone body. GXP21xx/17xx/16xx phones support this feature by changing the LED keys color and status on the MPKs/VPKs on phone body, GXP2140 and GXP2170 are expandable with 1 to 4 expansion modules to support BLF feature. Additionally, the phone system is also able to pick up the calls to the monitored extensions.

Configuration Via Web Browser

GXP21xx/17xx/16xx embedded Web server responds to HTTP/HTTPS GET/POST requests. Embedded HTML pages allow a user to configure the IP phone through a Web browser such as Google Chrome, Mozilla Firefox and Microsoft's IE. To access the Web GUI:

1. Connect the computer to the same network as the phone.
2. Make sure the phone is turned on and shows its IP address. You may check the IP address by pressing Up arrow button when phone is at idle state.
3. Open a Web browser on your computer.
4. Enter the phone's IP address in the address bar of the browser.
5. Enter the administrator's login and password to access the Web Configuration Menu

Note:

- The computer has to be connected to the same sub-network as the phone. This can be easily done by connecting the computer to the same hub or switch as the phone connected to. In absence of a hub/switch (or free ports on the hub/switch), please connect the computer directly to the PC port on the back of the phone.

- If the phone is properly connected to a working Internet connection, the IP address of the phone will display in MENU->Status->Network Status. This address has the format: xxx.xxx.xxx.xxx, where xxx stands for a number from 0-255. Users will need this number to access the Web GUI. For example, if the phone has IP address 192.168.40.154, please enter "http://192.168.40.154" in the address bar of the browser.

- There are two default passwords for the login page:

User Level	User	Password	Web Pages Allowed
End User Level	user	123	Only Status and Basic Settings
Administrator Level	admin	admin	Browse all pages

Table 1: Default Passwords for Login Page

The password is case sensitive with maximum length of 25 characters.

- When changing any settings, always SUBMIT them by pressing the "Save" or "Save and Apply" button on the bottom of the page. If the change is saved only but not applied, after making all the changes, click on the "APPLY" button on top of the page to submit. After submitting the changes in all the Web GUI pages, reboot the phone to have the changes take effect if necessary (All the options under "Accounts" page and "Phonebook" page do not require reboot. Most of the options under "Settings" page do not require reboot).

BLF Key Configurations

To configure the BLF feature on GXP21xx/17xx/16xx phones:

1. On the Web GUI, click on “Settings”.
2. On the drop-down list, click on “Programmable Keys”, as the figure shows below:

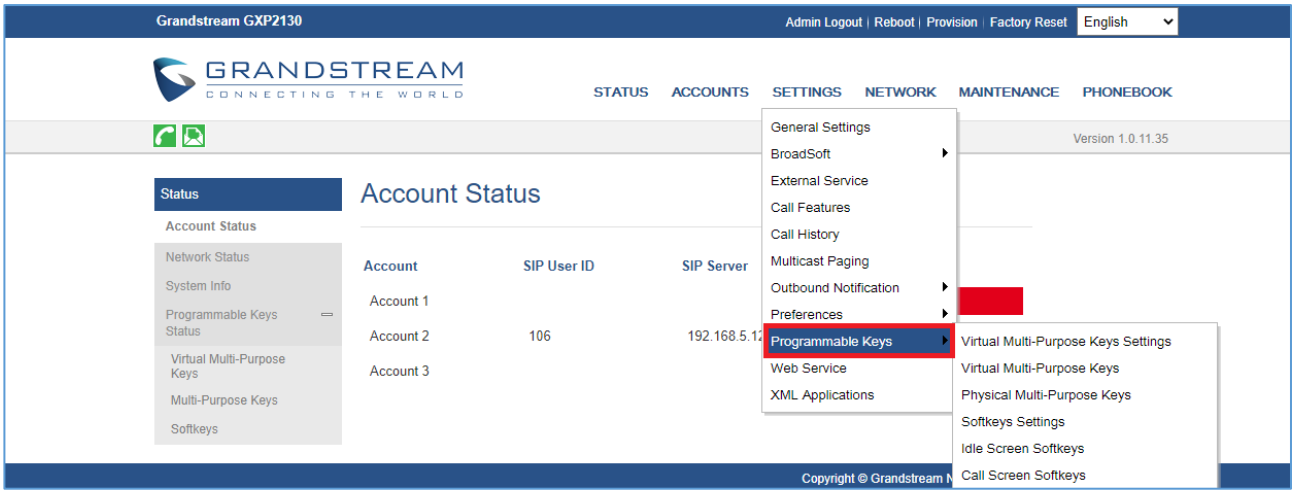

Figure 1: Programmable Keys Settings

3. Go down to the “Multi-Purpose Keys” or “Virtual Multi-Purpose keys” section of the page. Click on the dropdown menu of the key being set up. Scroll down and click on “Busy Lamp Field (BLF)”.

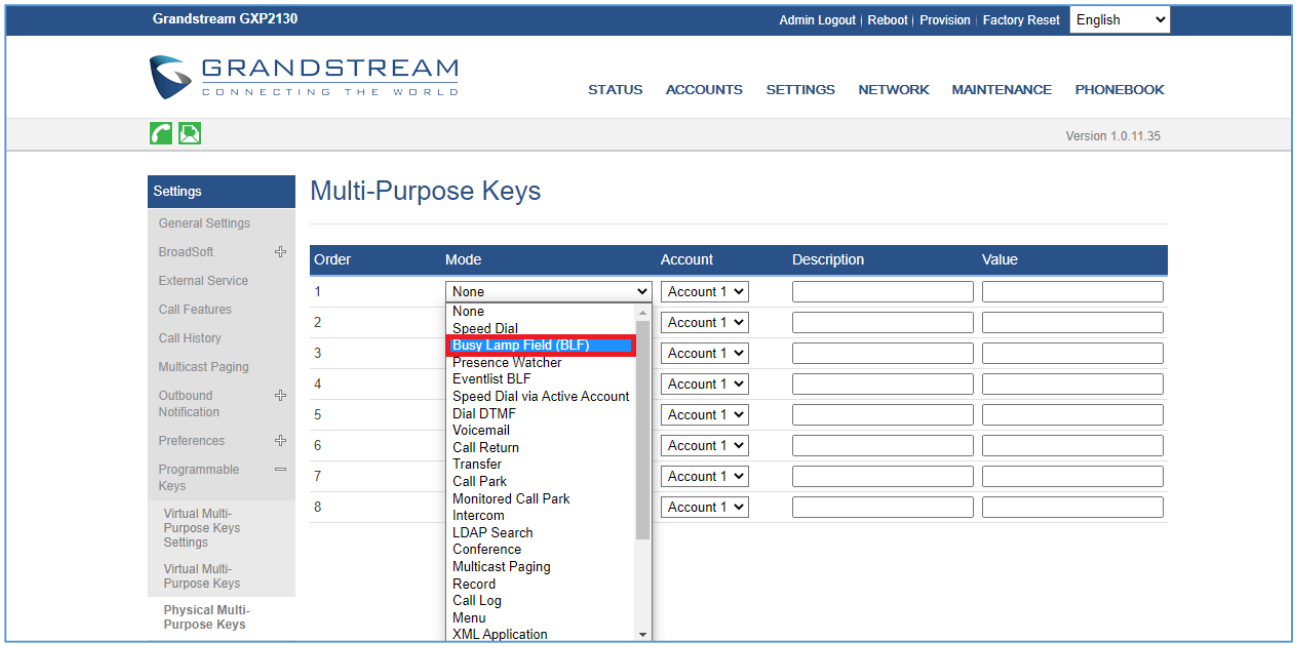

Figure 2: Configure Busy Lamp Field Key

4. On the “Account” dropdown menu, select the account associated with the IP PBX that carries the extension being set up.

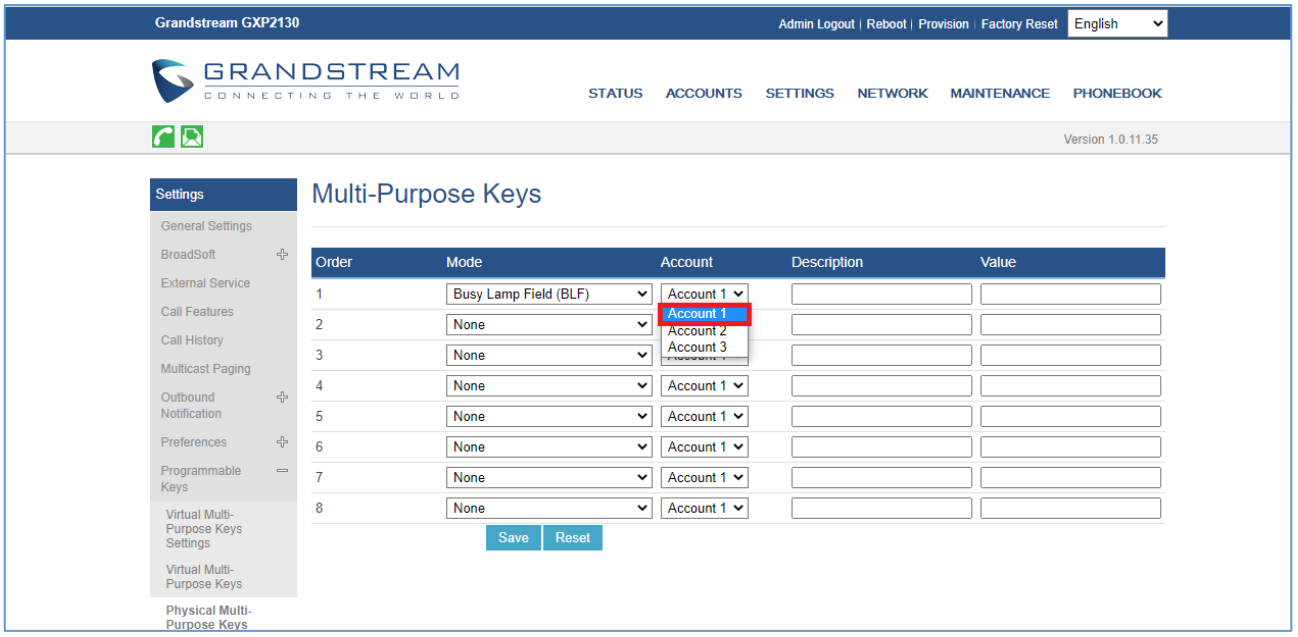

Figure 3: Select Associated Account

5. In the “Description” field, type the name of the individual or department that you want to associate with the extension being set up.

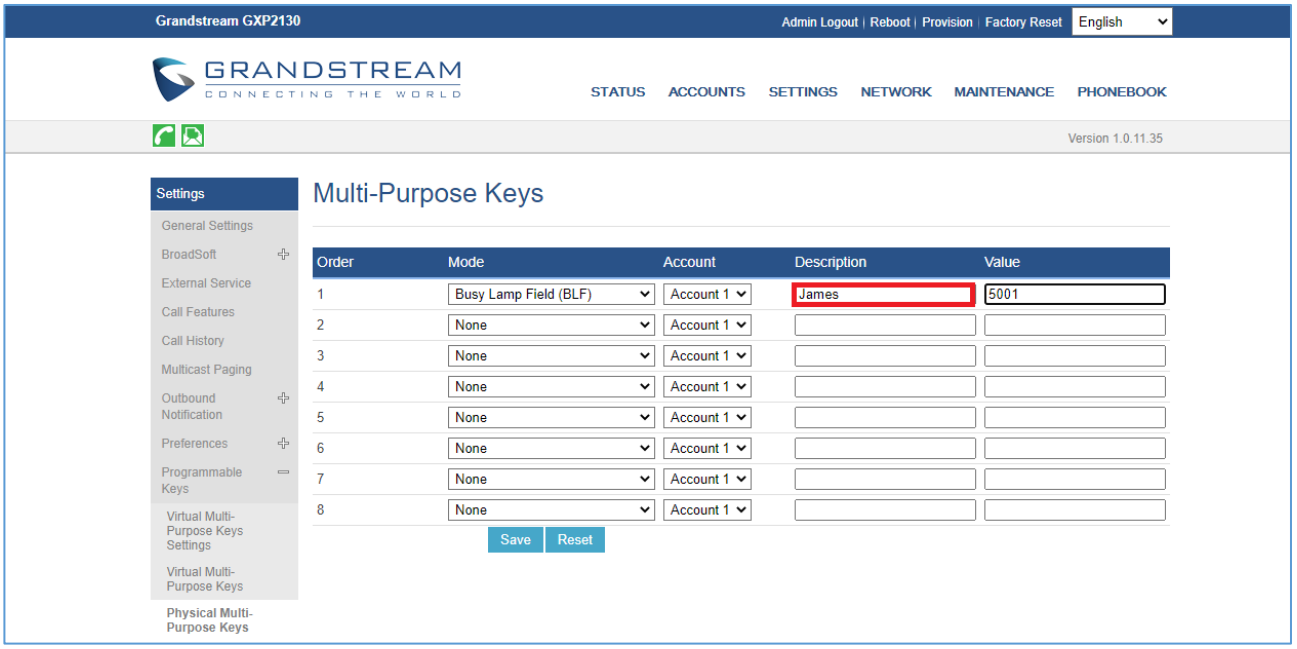

Figure 4: Add Description.

6. In the “Value” field, type the extension number for the extension being set up.

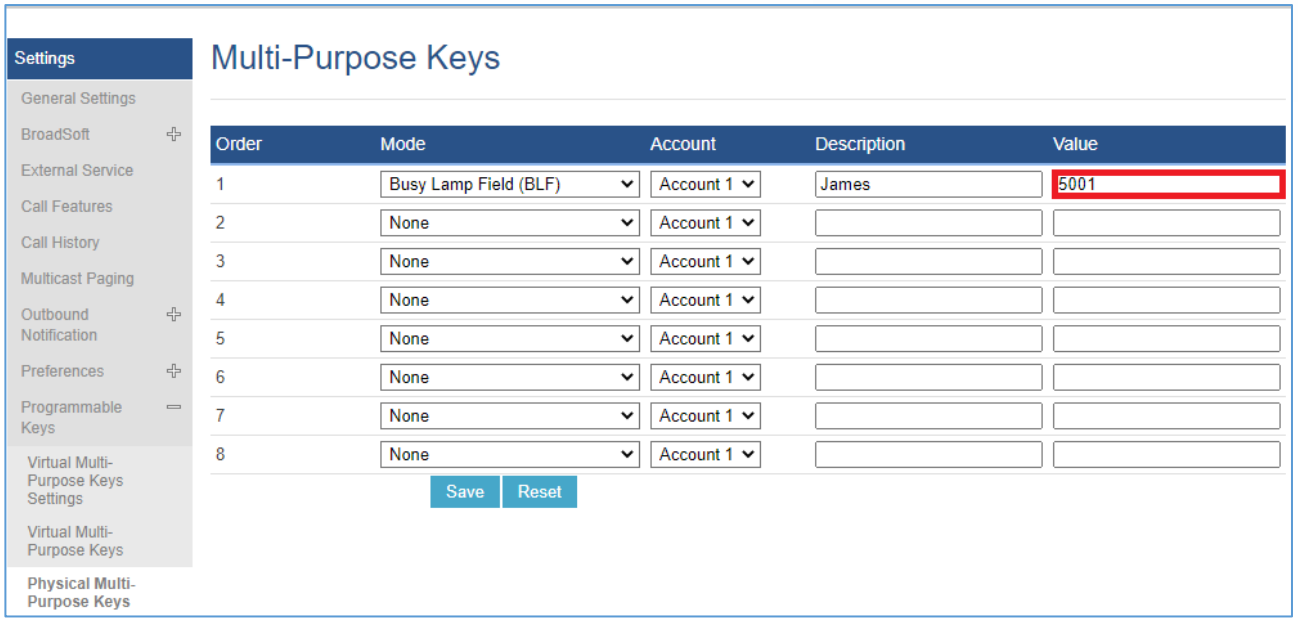

Figure 5: Add Extension Value

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

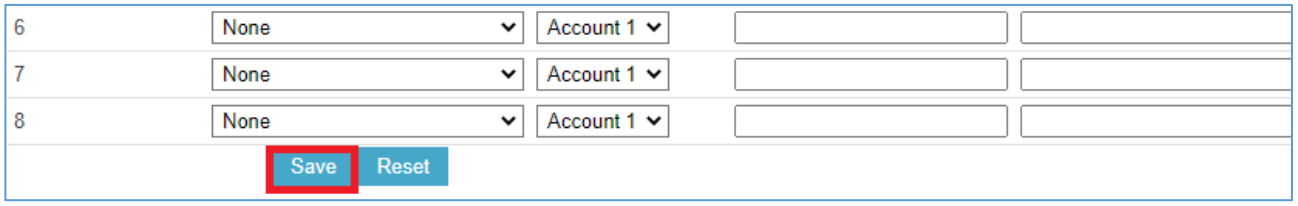

Figure 6: Save changes.

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.

The following table shows the BLF indicator status in different scenarios:

Monitored Extension Behavior	VMPK (BLF Background Status for GXP21xx)	VPKs/MPKs (LED Indicator Status)	Extension Board Key Status (Only for MPK Extension Supported Models)
Idle	Solid green	Solid green	Solid green
Placing a call	Solid red	Blinking green	Blinking green
Ringing	Solid red	Blinking red	Blinking red
During a call	Solid red	Solid red	Solid red
Hold the call	Solid red	Solid red	Solid red
Call Park	Solid red	Blinking red	Blinking red
Monitored extension not registered/BLF subscription failed	Solid grey	Off	Off

Table 2: The BLF Indicators Status in Different Scenarios

Directed Call Pickup

Directed call pickup feature allows GXP21xx/17xx/16xx 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, GXP21xx/17xx/16xx phones user should tap the "Busy Lamp Field" MPK/VPK button to answer the call for the monitored user.