



Grandstream Networks, Inc.

GRP26XX Carrier-Grade IP Phones

**Multicast Paging User Guide**



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## INTRODUCTION

Multicast paging is an approach to let different SIP users listen to a page from a common multicast IP address. In multicast page call, one-way audio will setup from sender to listeners, but the listeners cannot talk to each other. The sender and listeners must be located within the same LAN.

GRP26XX phones support multicast page sending and listening on firmware version 1.0.0.31 or higher. Users could configure line keys or multi-purpose keys to send multicast paging. Also, GRP26XX Carrier-Grade IP Phones are capable to listen to at most 10 different multicast addresses by following defined preference.

This document serves as an end user guide on how to configure multicast page on the GRP26XX Carrier-Grade IP Phones. To learn more about GRP26XX's basic and advanced features, please visit <http://www.grandstream.com/support> to download the latest "GRP26XX User Guide" and "GRP26XX Administration Guide".



## SENDING MULTICAST PAGING

### Configuration

Sender multicast page configurations are under GRP26XX's Web UI → **Settings** → **Programmable Keys** → **Virtual Multi-Purpose Keys**.

1. Set the key **Mode** to **Multicast Paging** in dropdown list.
2. Enter the multicast paging description in **Description** field.
3. Enter multicast paging address and port in **Value** field.

The range of multicast page address is 224.0.0.0 to 239.255.255.255 with a port not in use by phone.

The **Figure 1** and **Figure 2** show the example of setting Virtual Multi-purpose Keys/ Physical Multi-purpose keys to multicast page sending key.

Virtual Multi-Purpose Keys					
Order	Mode	Account	Description	Value	Locked
1	Default	1			<a href="#">Edit VPK</a>
2	Default	2			<a href="#">Edit VPK</a>
3	Default	3			<a href="#">Edit VPK</a>
4	Multicast Paging	1	Sales	237.11.10.11:6767	<a href="#">Edit VPK</a>
5	Multicast Paging	1	Support	237.11.10.12:6768	<a href="#">Edit VPK</a>
6	Multicast Paging	1	Warehouse	237.11.10.13:6769	<a href="#">Edit VPK</a>

**Figure 1 : Sending Multicast Page Configuration by using VPKs**

#### Notes:

- GRP2614 supports MPKs under Web UI **Settings** → **Programmable Keys** → **Physical Multi-Purpose Keys**.



## Multi-Purpose Keys

Order	Mode	Account	Description	Value
1	Multicast Paging	Account 1	Sales	237.11.10.11:6767
2	Multicast Paging	Account 1	Support	237.11.10.12:6768
3	Multicast Paging	Account 1	Warehouse	237.11.10.13:6769
4	None	Account 1		
5	None	Account 1		

Figure 2 : Sending Multicast Page Configuration by using MPK For the GRP2614

- GRP26XX supports 6 codecs for Multicast Paging. Users can specify the multicast page sending codec under **Web UI → Settings → Multicast Paging → Multicast Paging Codec**.
- The supported codecs are PCMU, G.729A/B, G.723.1, PCMA, G.726-32 and G.722.

## Send Multicast Paging Call

After configuring the sender multicast page, users could make a multicast page to remote parties.

1. Press the configured MPK or Line Key to send a multicast page.

The LED light of the key will turn green and the phone screen will show the multicast address with defined label. See **Figure 3** Multicast Page screen.

2. Press the “**EndCall**” soft key to end the multicast paging.

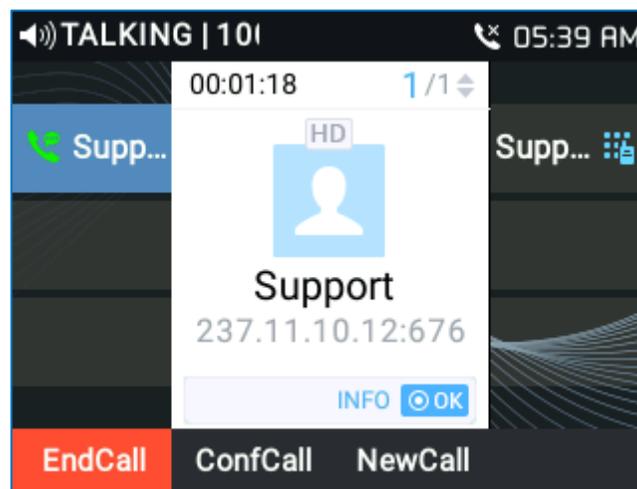


Figure 3 : The Multicast Page Screen



# RECEIVING MULTICASTPAGING

## Configuration

To receive multicast page, the GRP26XX must be well configured to listen to the right address and port. The configuration is set up under **Web UI → Settings→ Multicast Paging**. There are 10 listening address supported with priority levels 1 to 10. Optionally, each of these addresses can also have a label that will display on LCD when the page is received.

### Multicast Paging

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Allowed In DND Mode  No  Yes

Paging Barge Disabled ▾

Paging Priority Active  Disabled  Enabled

Multicast Paging Codec G.722(wide band) ▾

Multicast Channel Number 0

Multicast Sender ID

### Multicast Listening

Priority	Listening Address	Label
1	<span style="border: 1px solid gray; padding: 2px;">237.11.10.11:6767</span>	<span style="border: 1px solid gray; padding: 2px;">Sales</span>
2	<span style="border: 1px solid gray; padding: 2px;">237.11.10.12:6768</span>	<span style="border: 1px solid gray; padding: 2px;">Support</span>
3	<span style="border: 1px solid gray; padding: 2px;">237.11.10.13:6769</span>	<span style="border: 1px solid gray; padding: 2px;">Warehouse</span>
4	<span style="border: 1px solid gray; padding: 2px;"></span>	<span style="border: 1px solid gray; padding: 2px;"></span>
5	<span style="border: 1px solid gray; padding: 2px;"></span>	<span style="border: 1px solid gray; padding: 2px;"></span>

Figure 4 : Multicast Paging

Table 1 : Receiving Multicast Page Configuration

Settings → Multicast Paging	
<b>Allowed In DND Mode</b>	Allow Multicast paging when DND Mode is enabled.



<b>Paging Barge</b>	Assigns any number from 1 to 10. When enabled, during active call if incoming multicast page is higher than this value, the call will be held and multicast page will be played. Default setting is “Disabled”.
<b>Paging Priority Active</b>	If enabled, during a multicast page if another multicast is received with higher priority that one will be played instead. Default setting is “Disabled”.
<b>Multicast Paging Codec</b>	The codec for Multicast page sending. The default setting is G.722. G.729A/B, PCMA, G.726-32 and G.722 (wide band) are supported as well.
<b>Multicast Channel Number</b>	Multicast Channel Number range is 0-50. 0 for normal RTP packets, 1-50 for Polycom multicast format packets.
<b>Multicast Sender ID</b>	Outgoing caller ID that displays to your page group recipients (for multicast channel 1-50).
<b>Multicast Listening</b>	Support 10 of listening multicast address with priority levels 1-10 with 1 being the highest priority. The lower the level, the higher the priority.

### Paging Barge

This option is to control the priorities between multicast page and common SIP call. Available options are **Disabled** and numbers 1 to 10. If the option is set to disabled then all incoming pages are ignored while in call.

When the option is set to number, **Paging Barge** is enabled. If the number of Paging Barge is higher than an incoming page’s priority value (determined by the position in the list 1-10) then the incoming page is not played. Similarly, if the Paging Barge value is lower than an incoming page’s priority value, and then the active SIP call will be held. As an example, in **Figure 3**, the Paging Barge is configured as 3. During an active call if incoming multicast page priority is greater or equal to 3, the current active call will be held, and page will be played. However, if the incoming multicast page priority is 1 or 2, the current active call will be kept.

### Paging Priority Active

This option is to control the priorities among different multicast pages. If the option is disabled, the phone ignores any incoming pages when a page is already being played. Otherwise, incoming pages with a higher priority will be played instead of the current page. For example, if the phone is playing a page whose priority is 5 and there is an incoming page with priority 3, the priority 5 page will stop and the priority 3 page will play instead.

### Receive Multicast Paging Call

After multicast page listening well configured, please reboot the phone to let the settings take effect. When there is a page on the listening address and port, the phone will play the incoming audio automatically. User can press “**EndCall**” softkey to end the page.

