
OVERVIEW

The IPT user can listen to BGM through the speaker when the station is idle.

The BGM start access code is dialed or the BGM button is pressed to send BGM through the IPT. When the BGM start access code is used, the BGM number is dialed as an option. If the BGM number is omitted, the number used immediately before (specified by the access code or feature button) is applied.

When using the BGM button, a BGM number already programmed for the button is used. "User Programming" is used to correlate BGM numbers to feature buttons. If the BGM button is set on an extension station, it will light red if the station is in an enable state to send BGM (even though BGM is actually not sent due to line busy or other reason). The station must be in an allow state for "Class Of Service for BGM Listening Through station" to send BGM through a station.

The BGM stop access code is dialed or the BGM button is pressed to stop BGM.

BGM is sent in the same volume as an ordinary speaker call volume when a station is idle. BGM stops when a station originates a call, makes registration, performs another operation, or receives an incoming call. In about one second, BGM sending resumes after station operation or a call ends and the station idles.

Note that BGM volume is not changed after adjustment because it changes speaker incoming tone volume if volume is changed while playing BGM. This is the same operation as the adjustment of the speaker incoming tone volume without BGM.

Notation For Using Media Server

The sound source of BGM is shared with Music On Hold.

The BGM feature requires that the media resource is shared with MOH and the paging feature. BGM cannot be played if the media resource cannot be hunted.

BGM cannot be played and the user hears no tone even if the user activates BGM when the media resource cannot be hunted at the time the station goes idle. However, BGM can be played when the media resource can be hunted at the time the station is used to talk and goes idle again.

Background Music (BGM)

Background music audio can be played through the speakers of IP5000-series telephones. IPedge Net supports up to 15 BGM WAV files. Selection of the BGM source to be played can be done individually by each telephone user and for each external page zone using Enterprise Manager.

Background Music (BGM)	You can set background music over your telephone speaker. At least one music source must be connected to your system. Up to 16 different music sources can be applied to the IPedge Net system: the first source is Quiet Tone, all others can be music or recorded information. If media resources are exhausted, the user will temporarily be unable to hear BGM.
Enable Background Music on your Telephone Speaker	Press BGM . LED turns on. Or, Press an extension button + #490 + <i>n</i> + #, where <i>n</i> is the music source 1~15.
Cancel Background Music on your Telephone Speaker	Press BGM . LED turns off. Or, Press an extension button + #491 .
Adjust Volume	The phone is in an idle state when listening to BGM. Attempting to adjust the BGM volume at this point will result in only a ringer tone adjustment and the BGM will restart at the beginning of the music source. BGM volume can only be adjusted when the phone is in use. The 'in use' state is when a call is being received or dialed. To change the volume of the BGM, press the PDN key, this interrupts the BGM and initiates the 'in use' state. When you hear the dial tone, use the Vol key to adjust the tone up or down. Press the PDN key again to return to the BGM in progress.

PROGRAMMING

No physical interface

The Media Server can have up to 15 MOH audio .wav files.

Refer to Operation for Volume adjustment information.

Note: Music files played in systems using G.729 are highly compressed. We recommend selecting music with moderate to slow tempo and limited tone range.

The audio files can be named anything as long as they end with .wav

System Data

1. Click on **System > System Data**.
2. Select the Server from the dropdown.
3. Select the external page group number assigned to external paging.
4. Click on **Save** icon or click **Apply To** in order to assign the parameter to multiple servers.

Class of Service

1. Click on **System > Class of Service**.
2. Select the Server from the dropdown.
3. COS Number – Select the COS Number.
4. Place a check mark to the right of BGM Enable for users to be able to turn on/off BGM for the station (default is enabled).
5. Place a check mark to the right of External BGM Control for users to be able to turn on/off BGM for external features (default is disabled).
6. Reset to Default sets all values to factory defaults.
7. Click on **Save** icon or click **Apply To** if you want to copy the changes to multiple servers.

Music on Hold

1. Select **System > Music on Hold**.
2. Select the Server which contains the MOH source(s) you want to program.
3. Enable or disable MOH sources as needed.
4. Reset to Default sets all values to factory defaults (default all sources on).
5. Click on **Save** icon or click **Apply To** if you want to copy the changes to multiple servers.

Program a BGM key on a station

To program a BGM key on a station.

1. Select **Station > Station Assignment**.
2. Check the Station to be programmed.
3. Click on **Edit** icon.
4. Select the **Key tab**.

5. Right Click a button to select it and display the options.
6. Select **Features > BGM Key**.
7. Click on **Save** icon.

Supported audio .wav files

The audio files can be named anything (as long as they end with .wav). Supported audio wav files are shown in the table below.

Digitizing Method	Sampling Rate (kHz)	Resolution (Bits)	Bit Rate (Kbps)
OKI ADPCM	6	4	24
OKI ADPCM	8	4	32
G.711 PCM A-law and mu-law	6	8	48
G.711 PCM A-law and mu-law	8	8	64
Linear PCM	8	16	128
Linear PCM	11	8	88
GSM 6.10 full rate (Microsoft format)	8	(value ignored)	13
G.726 bit exact	8	2	16
G.726 bit exact	8	4	32

MP3 To WAV Conversion

For complete information on converting MP3 files into MOH and BGM compatible WAV files refer to the Programming section of the Music On Hold feature description.

CAPACITY

The maximum number to play BGM simultaneously = the number specified by programming "mediaServerGeneric." However, the number of media resources is reduced if other features such as MOH and paging are using the resources.

AVAILABILITY

Station/Line	Descriptions
IPT	Applied
Soft IPT	Applied
IP Attendant	Applied

RESTRICTION

Entering the BGM starting feature access code or pressing the BGM button at stopping state is ignored if the general purpose media resource is not available.

HARDWARE

No additional hardware is necessary for this feature.

FEATURE INTERACTION

Back Light	The BGM Listing status is handled as idle for Backlight control. BGM does not have an influence on the Backlight feature.
Basic Survivability	<p>When BGM is invoked in one server, BGM stops if the IPT switches over to another server. The user can hear BGM again by entering the BGM access feature in the new server. However, the station cannot go failback to the primary server if it keeps hearing BGM from the secondary server.</p> <p>The administrator needs to set the same BGM numbers for BGM contents for both primary and secondary server.</p>
Cancel Button	Pressing the Cancel button after activating or deactivating BGM cannot cancel the operation.
Class Of Service, Class Of Service Override	<p>When Class of Service is changed using the Class of Service Override feature, in order to refer for "Class of Service for BGM listening through the IPT station ," only previous "Class of Service" set at extensions will be referred.</p> <p>However, when IPT stations return to idle, permitted/ not permitted by Class of Service is checked before executing Class of Service Override. BGM will stop during the check. After that, BGM listening will resume.</p>
IP Phone User Mobility	<ul style="list-style-type: none"> • BGM activation is canceled after IPT logs out. • BGM stops when IPT logs in.
IPT-Softphone	BGM is required to be set to OFF when POP up feature is used on an IPT softphone.
LCD Shift Key	<p>Each feature button can be set on both the fore side and the hidden side.</p> <p>The service using LED continues even though it is not indicated while on the hidden side.</p>
Make Busy	BGM will stop after the IPT station goes into make busy mode while playing BGM and will become idle.
PC Attendant	The attendant in Position Busy mode can use the same as IPT. Currently it is possible to use in another mode.
Private Networking Over IP	It is not supported to play BGM across nodes. BGM hearing from IPT is peculiar to that node.

SIP Extension SIP is not supported to use the Background Music feature access code. A Success Tone may return but BGM does not start.