

Char Pmslink Integration Guide

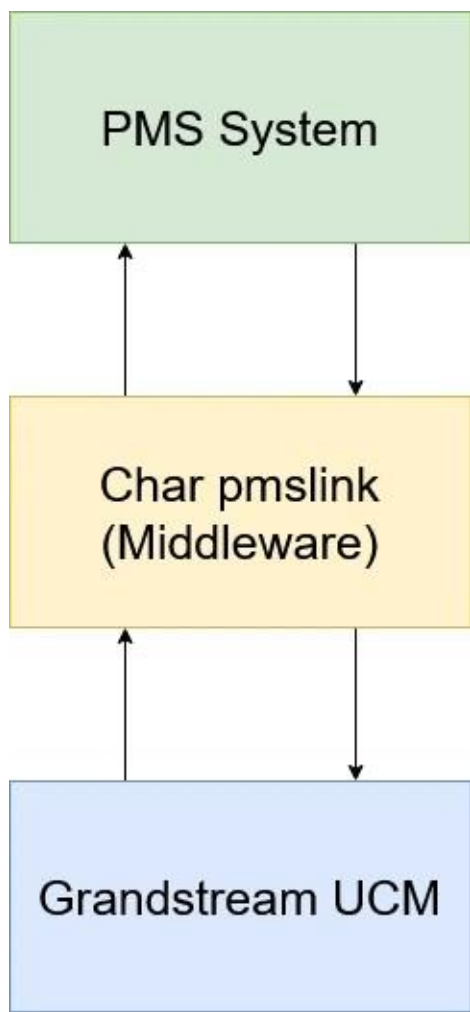
Property Management System is a software application used in the hospitality industry to automate some hotel functions such as guest booking, guest details, etc...

The system can be divided into three parts:

- PMS (Property Management System)
- PMSI (Property Management System Interface)
- PBX

Grandstream IPPBXs have integrated charpms which support a large variety of PMS software, providing the following hospitality features: Check-in, Check-out, set Room Status, Wake-up call, and more.

The following figure illustrates the communication flow between the PBX and PMS software, which is done through a middleware system, charpms, acting as the interface between both parties.



UCM & PMS interaction

The following list includes all PMS systems that are compatible with Char Pmslink:

http://www.chardesarrollodesistemas.com/download/general/documentation/char_pms_integrated_en.pdf

For more information about Char Pmslink, you can visit their website below:

<https://charpmslink.com/>

Supported PMS Features

Grandstream IPPBXs support the following features using charpms.

Features
Check-In
Check-out
Wake-up Call

Update
Room Status
Room Move
Do Not Disturb
Mini Bar
MSG

Table 1: PMS Supported Features

Check-in

The **Check-in** feature is used to store information such as Room Number, Extension, Username, Guest Account, Guest Credit Money, Maid Code, Arrival/Departure Date upon guest arrival.

Guest language can also be received from PMS to customize phone system prompts (if possible).

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Check-in	JohnDoe			1155		 

Check in

Check-out

The **Check-out** feature is used upon guest departure to clear stored data at check-in and restore the extension’s default settings, including language, privileges, and delete all voicemails on that extension.

The “Room Status” will be set to “checkout”.

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Check-out						 

Check out

Update Entry

When an update is needed for an entry, in case of an error, for instance, PMS sends an **Update** command to the IPPBX containing Name, Surname, and Language to update according to modifications made on the PMS side.

Update Room Status

The **Room Status** feature is used to update the status of the room.

Three statuses are available:

- **Cleaning**
- **Repairing**
- **Cleaning Repair finished.**

*23XXXX is the feature code to update the Room Status, where XXXX is the Maid Code.

When dialing *23XXXX, the room status (**Cleaning**, **Repairing**, or **Cleaning Repair finished**) should be selected by the maid using the corresponding status code.

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Cleaning	JohnDoe			956	2000	 

Figure 4 Cleaning

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Repairing	JohnDoe			956	2000	 

Repairing

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Check-in	JohnDoe			956	2000	 

Cleaning Repair Finished

Room Move

When a guest changes or moves to another room, the **Room Move** command is sent by the PMS through pmschar to notify a guest room change, and all stored information will be moved to the new room.

In the figure below, all data in room 4000 is moved to room 2000.

☐	Address	Room Number	Extension	Room Status	User Name	Guest Account	Guest Category Code	Guest Credit Money	Maid Code	Options
☐	2000	2000	2000	Check-in	JohnDoe			956	2000	 
☐	4000	4000	4000	Check-out						 

Room Move

Wake-up Call

The **wake-up** feature is used to make the extension ring upon the PMS signal.

The UCM sends a notification message to the PMS, including the time and date of the answered call, in order for the system to repeat (or not) the wake-up call.

Wake-up Call Action Status

When setting up a Wake-up call on the PMS, IPPBX initially sets "Action Status" to **Programmed**.

Once the call is made, IPPBX sets "Action Status" to **Executed**.

Programmed Wake-up calls can be **cancelled** from the PMS. The UCM will update the Action Status to **Cancelled** as shown on the following figure.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Cancelled	Single	No action	2017-08-10	09:30	 

Wake up Call Cancelled

Wake-up Call Types

Two types of wake-up calls are available:

Single

The call will be made once at the programmed time.

Room Number	Action Status	Type	Answer Status	Date	Time	Options
2000	Programmed	Single	No action	2017-08-10	09:30	 

Single Wake up Calls

Daily

The call will be repeated each day at the programmed time.

Room Number ↕	Action Status ↕	Type ↕	Answer Status ↕	Date	Time	Options
2000	Programmed	Daily	No action	2017-08-10	09:30	 

Daily Wake up Calls

Wake-up Answer Status

Three Answer Statuses are available in response to the Wake-up call:

Answered

If the guest answers the wake-up call, UCM6XXX will set "Answer Status" to **Answered**.

Room Number ↕	Action Status ↕	Type ↕	Answer Status ↕	Date	Time	Options
2000	Executed	Daily	Answered	2017-08-10	06:53	 

Wake up Call Answered

Rejected

If the guest rejects the wake-up call, the IPPBX will set "Answer Status" to **Busy**.

Room Number ↕	Action Status ↕	Type ↕	Answer Status ↕	Date	Time	Options
2000	Executed	Daily	Busy	2017-08-10	06:54	 

Wake up Call Busy

No Answer

If the guest doesn't answer the wake-up call after the timeout, IPPBX will set "Answer Status" to **No Answer**.

Room Number ↕	Action Status ↕	Type ↕	Answer Status ↕	Date	Time	Options
2000	Executed	Daily	No Answer	2017-08-10	06:55	 

Wake up Call No Answer

Error

If an error occurs during the wake-up call, UCM6XXX will set "Answer Status" to **Error**.

Room Number ↕	Action Status ↕	Type ↕	Answer Status ↕	Date	Time	Options
2000	Executed	Daily	Error	2017-08-10	06:59	 

Wake up Call Error

MSG Notification

Sent by PMS through charpms to notify the existence of a new message for the guest (in Reception, voicemail, etc.)

Do Not Disturb

When **Do Not Disturb** is activated on an extension, all calls to that extension will get busy treatment.

This command is sent by PMS through charpms to enable/disable DND status.

Mini Bar

The mini-bar feature is used by the maid to monitor the consumer's goods.

Users need to first create the minibar and the maid code to consult the goods. Please refer to the **Mini-Bar** for more details.

IPPBX Configuration

The following configuration is based on charpms with firmware. The configuration may vary using higher firmware versions.

Create Extensions

To configure the IPPBX with a PMS Server, users need first to create some extensions on the IPPBX that will be associated with guests' rooms.

To create or modify existing extensions, log in to the IPPBX by typing its address on a browser, then go to **Extension/Trunk > Extensions**.

Configure IPPBX with PMS Server

To use all PMS features, make sure that the following feature codes are configured from IPPBX Web GUI **Basic Call Features** > **Feature Codes**:

- **Update PMS Room Status**
- **PMS Wake Up Service**

PMS

* PMS Wakeup Service ⓘ

*35

✓

* PMS Remote Wakeup Service ⓘ

*37

✓

* Update PMS Room Status ⓘ

*23 ⓘ

✓

PMS Feature Codes

Navigate to **Integrations > PMS > Basic settings**. The following table explains the fields needed to be configured to set the connection for the PMS system.

Field	Description
PMS Module	Select char pmslink.
Wake Up Prompt	Enter the IPPBX's port to use when communicating with the char pmslink Server.
PMS URL	Enter the server's URL address (i.e 192.168.6.185:8081/soap).
UCM Port	Enter the Password for the PMS system authentication.
Username	Enter the Username for PMS system authentication.
Password	Enter the Password for PMS system authentication.
Site	Enter the Site ID to identify the hotel on the PMS server.
Back-Up Voicemail Recordings	Used for backing up voicemail recordings to external storage after check-out.

Table 2: PMS Basic Settings

PMS

Basic Settings

Room Management

Check-in Management

Wakeup Service

Mini Bar

Housekeeper

General

PMS Module

char pmslink (formerly Hmobile)

* PMS URL ⓘ

192.168.6.220

* UCM Port ⓘ

8081

* Username

admin

* Password

••••••••

* Site

Sitename

Prompt

Wakeup Prompt ⓘ

Wake Call

Upload Audio File

Room Status Update Prompt ⓘ

Default Room Status Update Pro...

Upload Audio File

Automatically Clear/Reset

Automatically Clear Phone Call History ⓘ

None

Cancel

Save

PMS Basic Settings

Room Management

Users can then create and manage Rooms from **Integrations > PSM > Room Status**:

- Click **Create Add Room** to create a new room for a guest.

PMS > Create New Room

* Address

1005

2 - 128 characters, Please enter only digits.

* Room Number

1005

1 - 64 characters, Please enter only numbers, underscores (_), and hyphens (-).

* Extension 1

2000 "Arthur Morgan"

* Extension 2

None

* Call Privileges ⓘ

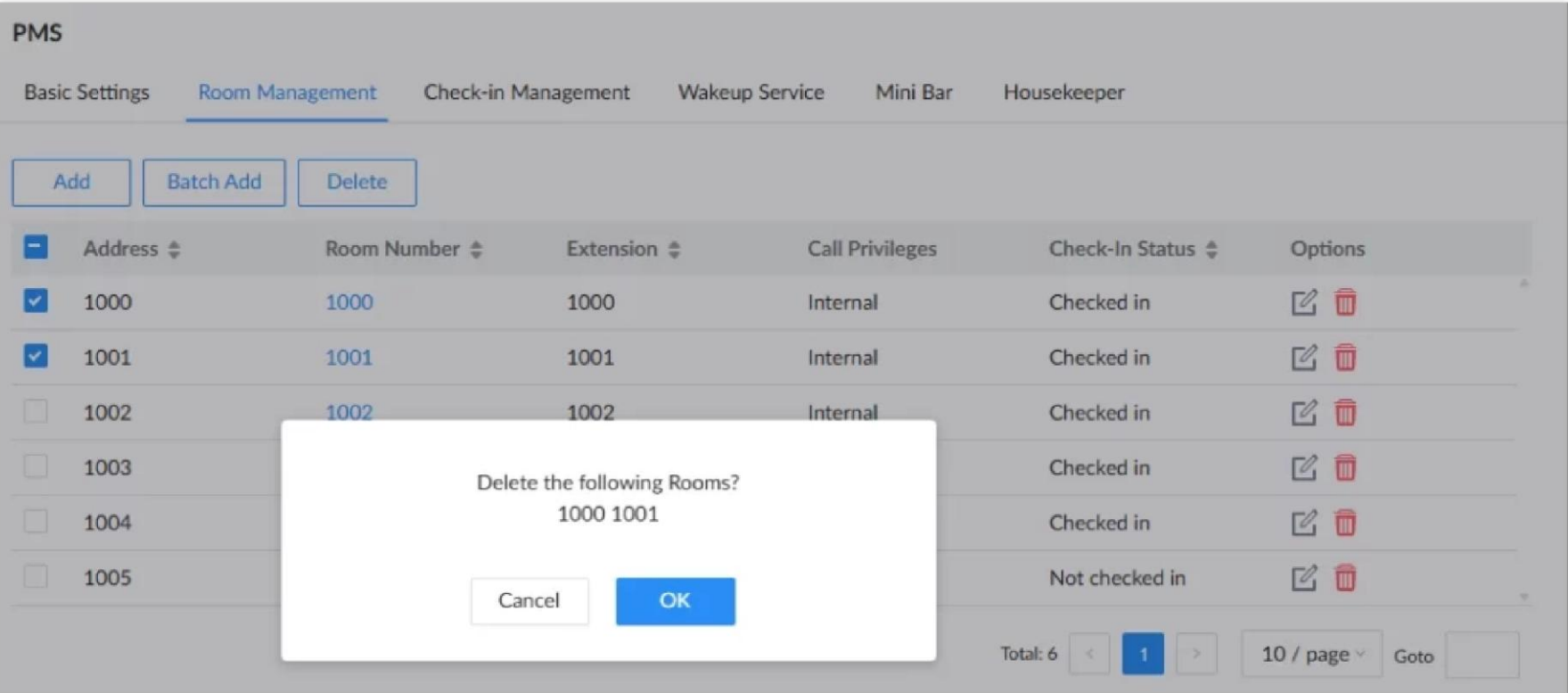
Internal

Cancel

Save

Create a New Room

- Click on **Delete Selected Rooms** to delete any selected rooms.



Delete Selected Rooms

- Click on **Batch Add Rooms** to create multiple rooms at the same time.

PMS > Batch Add Rooms

* Start Address Number

1006

* Start Room Number

1006

* Start Extension

2002

* Number of Extensions

☒ 1

☐ 2

* Create Number

5

* Call Privileges ⓘ

Internal

Preview

Cancel

Save

Batch Add Rooms

The user can also click  next to a room to delete it, or click  to edit the room’s options.

PMS

Basic Settings

Room Management

Check-in Management

Wakeup Service

Mini Bar

Housekeeper

Add

Batch Add

Delete

☐	Address ↕	Room Number ↕	Extension ↕	Call Privileges	Check-In Status ↕	Options
☐	1000	1000	1000	Internal	Checked in	
☐	1001	1001	1001	Internal	Checked in	
☐	1002	1002	1002	Internal	Checked in	
☐	1003	1003	1003	Internal	Checked in	
☐	1004	1004	1004	Internal	Checked in	
☐	1005	1005	2000	Internal	Not checked in	

Total: 6

< 1 >

10 / page ▾

Goto

Room Status

Wake Up Service

Users can create a New Wake Up service for Rooms from **Integration > PMS > Wake Up Service**. Click on **Create New Wake Up Service**. The following window will pop up:

Create New Wakeup Service

* Room Number :

2000

* Select Time :

2019-12-30

16:42

* Action Status :

Programmed

Type :

Single

Create New Wake Up Service

Please refer to the following table for the fields of Wake-Up Service:

Field	Description
Room Number	Select the room number where to call.
Time	Set the time of the wake-up call.
Action Status	Show the status of the call: Programmed: the call is scheduled for the time set. Canceled: the call is canceled. Executed: the wake-up call is made.
Type	Single: The call will be made once at a specific time. Daily: The call will be repeated every day at the specific time

Table 3: PMS Wake Up Service

The following figure shows the status of the wakeup call once the call is made at the specified time.

☐	Name ↕	Extension ↕	Status	Action Status ↕	Answer Status ↕	Date	Time	Options
☐	John	1000	Enabled	Executed	Answered	2017-05-04	05:18	

Mini Bar

Create New Mini Bar

To create a new minibar, click on “Add Mini Bar” under UCM WebGUI > **Integrations** > **PMS** > **Mini Bar**. The following window will pop up:

Create New Mini Bar

* Code:

* Name:

* Prompt:

Skip Maid and Password

☐

Authentication:

Enable Continuous Multi

☐

Goods Billing:

Upload Audio File

Create New Mini Bar

Code	Enter a non-existing extension number to be dialed when using the minibar feature.
Name	Enter a name for the minibar.
Prompt	Select the Prompt to play once connected to the minibar.
Skip Maid and Password Authentication	If enabled, the default maid code will be 0000; no authentication is required. Enter 0000 followed by # to access the consumer goods
Enable Continuous Multi Goods Billing	If enabled, please separate the goods’ codes by * (star).

Table 4: Create New Mini-Bar

To create a new prompt, please refer to **CREATE CUSTOM PROMPT**

Create New Maid

Once the Mini Bar is created, a new maid needs to be created to consult the consumer goods.

To create a new maid, click on **Add** under UCM WebGUI > **Integrations** > **PMS** > **Maid Code**. The following window will pop up:

Create New Maid

* Maid Code:

1100

* Password:

123456

Create New Maid

Maid Code	Enter a code to identify the new maid. Only digits accepted. This code is required to identify the maid when checking consumer’s goods.
Password	Enter a password associated with the maid. Only digits accepted.

Table 5: Create New Maid

The user could either edit the “Maid” secret by clicking  , or delete a maid by clicking  to remove the selected maid.

Create Consumer Goods

Create then the consumer goods and set associated prompts to them.

- To create a new consumer good, click [+ Add Consumer Goods](#) under UCM webGUI > Integrations > PMS > Mini Bar, the following window will pop up:

Create New Consumer Goods

* Code :

* Name :

Create New Consumer Goods

Code	Enter the Goods Code.
Name	Enter the Name of the Goods

Table 6: Consumer Goods

- Users could edit the created consumer goods by clicking  . The name can be changed, while the consumer goods “Code” cannot:

Edit Consumer Goods: Water

* Code :

101

* Name :

Water

Edit Consumer Goods

To delete a consumer goods user could click  to remove the item.

The Minibar page shows as follows:

PMS

Basic SettingsRoom StatusWakeup ServiceMini BarMaid

+ Add Mini Bar

CODE	NAME	OPTIONS
4000	MiniBar	 

+ Add Consumer Goods

CODE ↕	NAME ↕	OPTIONS
101	Water	 

Using Mini Bar

To use the Mini Bar feature, follow the steps below:

1. Make a call to the Mini Bar extension (4000 in this example), and a voice prompt will be played.
2. Enter the Maid Code followed by a star and the password followed by a pound (example: 1100*123456#).
3. Type the consumer's code that the Maid wants to check, followed by a pound (example: 101#).

Create Custom Prompt

Prompts on PMS can be customized/personalized at the customer's convenience by either recording or uploading new prompts. Click on the "Prompt" option as shown on the following figure to be redirected to the "Custom Prompt" page, or go to **PBX Settings > Voice Prompt > Custom Prompt** page directly.

Create New Mini Bar

* Code:

* Name:

* Prompt: [Upload Audio File](#)

Skip Maid and Password ☐

Authentication:

Enable Continuous Multi ☐

Goods Billing:

Customize Prompt

Once the PMS prompt file (created/uploaded) is successfully added to the UCM6xxx, it will be shown in the prompt list options to select in different PMS scenarios.

Record New Custom Prompt

In the UCM6xxx web UI **PBX Settings > Voice Prompt > Custom Prompt** page, click on [+ Record](#) and follow the steps below to record a new prompt.

Record New Custom Prompt [X]

* File Name:

Format:

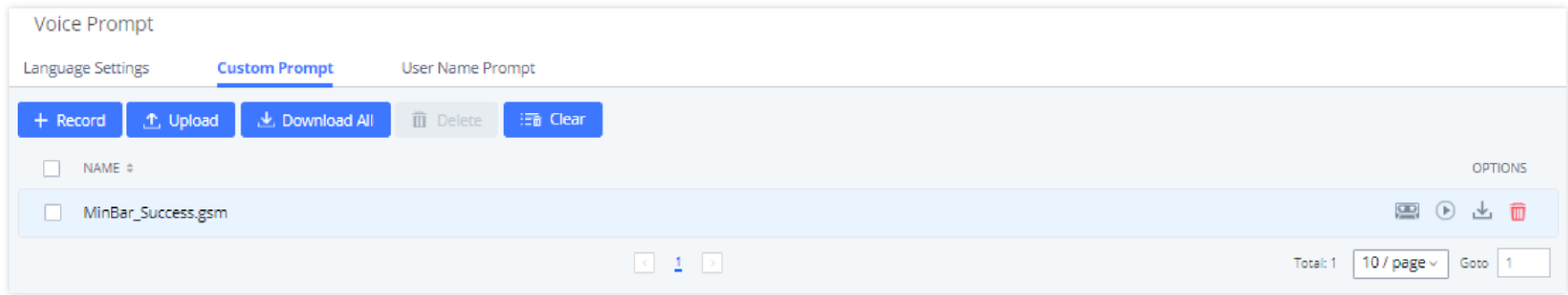
Extension:

[Cancel](#) [Record](#)

Record New Prompt

1. Specify the custom prompt file name.
2. Select the format (GSM or WAV) for the prompt file to be recorded.
3. Select the "Extension" to receive the call from the UCM6xxx to record the prompt.
4. Click the "Record" button. A call will be initiated to the selected extension.
5. Pick up the call and start the recording following the voice prompts.

- The recorded file will be listed in the Custom Prompts page (see figure 30). Users could select to rerecord, play, or delete the recording.
- Select the format (GSM or WAV) for the prompt file to be recorded.
- Select the “Extension” to receive the call from the UCM6xxx to record the prompt.
- Click the “Record” button. A call will be initiated to the selected extension.
- Pick up the call and start the recording following the voice prompts.
- The recorded file will be listed in the Custom Prompts page (see figure 30). Users could select to rerecord, play, or delete the recording.



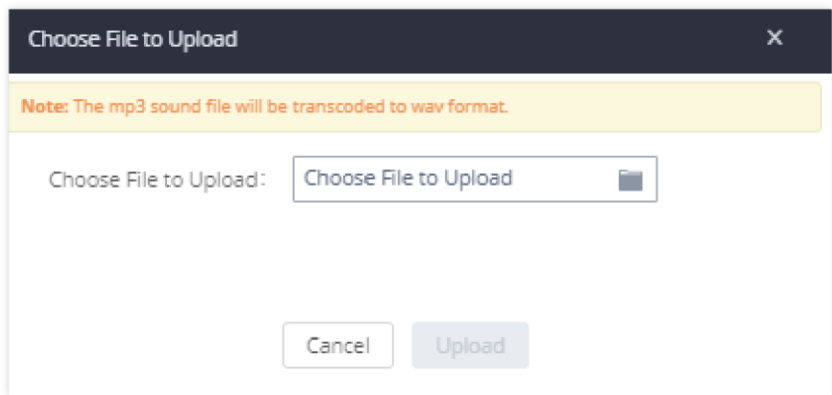
Custom Prompt

Upload Custom Prompt

If the user has a pre-recorded prompt file, click **Upload** on the Web GUI under **PBX Settings > Voice Prompt > Custom Prompt** page to upload the file to the UCM6xxx.

The following are PMS prompt requirements to be accepted by the UCM6xxx series:

- PCM encoded.
- 16 bits.
- 8000Hz mono.
- In .mp3 or .wav format; or raw/ulaw/alaw/gsm file with “.ulaw” or “.alaw” suffix.
- File size under 5M.



Upload Custom Prompt

Click on the button to select an audio file from the local PC, and click on it to start uploading it. Once uploaded, the file will appear in the “Custom Prompt” web page.