

# HDL<sup>®</sup>

HDL{ HDL-MZBOX-A50B.30 }



# Notices

## Disclaimer

Any changes or modifications made to the module which have not been expressly approved by HDL will void the product warranty.

The module can only be serviced by HDL trained technicians, the use of outside agencies to service any HDL product will void the product warranty.

This module must be installed and used in strict accordance to the HDL instructions, as detailed in the relevant HDL user documentation.

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## 1. Introduction

The HomePlay network player has been created to stream crystal clear audio to multiple rooms within a building. Controlled via an IOS / Android app, or a wall mounted HDL user interface, HomePlay allows you to manage the entirety of your audio collection from a single point, and stream audio directly from your favorite online providers. With the ability to directly play files from network attached storage devices (NAS), an onboard micro SD card slot, an onboard USB port, and your connected IOS & Android devices, total audio control has never been easier. Capable of playing MP3, WMA, AAC, AAC+, ALAC, FLAC, APE, and WAV file formats all of your music is now just a tap or click away.

### 1.1 Functionality

- ✓ Multi format support
- ✓ High fidelity audio streaming
- ✓ Simultaneous multi source multi room streaming
- ✓ Simultaneous single source multi room streaming
- ✓ Fully compatible with HDL room scenes and sequences

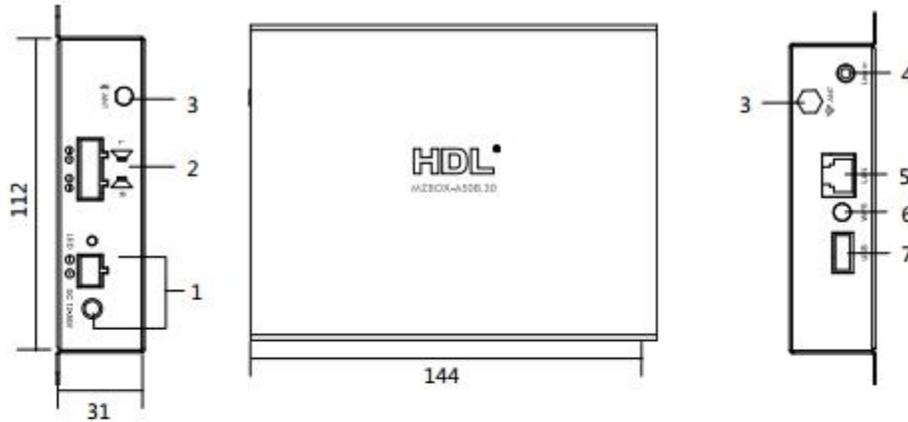
### 1.2 Parameters

| Audio system :                  |  |
|---------------------------------|--|
| Power Amplifier Rated output    | 32W+32W (8 $\Omega$ /ohms, 1kHz, 0.7%)   |
| Speaker Impedance               | 4-32 $\Omega$  |
| Dynamic Range                   | >87dB  |
| S/N Ratio:                      | >88 dB   |
| Stereo Separation               | >81.5dB (1KHz)   |
| Frequency Response              | 20Hz to 20KHz ( $\pm$ 3dB)   |
| Music Source :                  |  |
| Online Music Services Supported | Pandora, Spotfy, vTuner, Tidal, Qobuz, Rhapsody, iHeartRadio and TuneIn, more coming soon. |
| Music from Local Storage        | Tunes music stored locally on IOS device, music files on Android device or USB storage     |
| NAS                             | Play from your home network attached storage, DLNA compliant                               |
| USB                             | USB storage device   |
| Line in                         | Audio input  |
| Bluetooth Supported             | BQB Approval, BT 4.0, Dual-mode (2.1 BR / EDR)   |

|                                  |   |
|----------------------------------|---|
|                                  | + Low Energy Controllers), Compatible with v2.1 + EDR and Bluetooth 4.0 Low Energy (BLE), Max |
| Audio Formats Supported          | MP3/ WMA/ AAC/ AAC+/ ALAC/ FLAC/ APE/ WAV   |
| <b>Wi-Fi :</b>                   |   |
| Standard                         | 802. b/g/n  |
| Speed (Max)                      | 150M  |
| Operating Frequency              | 2. 4G   |
| SAR Value                        | 95dB  |
| Sample Rate                      | 44. 1Khz  |
| Antenna                          | 1T1R  |
| Antenna gain                     | 3dBi  |
| <b>NETWORKING :</b>              |   |
| Wireless Connectivity:           | Supports 802. 11 a/b/g/n standards  |
| Wired Connectivity:              | Single 10/100M RJ-45 jack   |
| <b>Environmental Conditions:</b> |   |
| Working temperature              | -5°C~40°C   |
| Working relative humidity        | Up to 90%   |
| Storage temperature              | -20°C~+60°C   |
| Storage relative humidity        | Up to 93%   |
| <b>Approved:</b>                 |   |
| CE, RoHS                         |   |
| <b>Product Information :</b>     |   |
| Power supply                     | AC100-240V, 60/50Hz/DC  |
| Input                            | DC24V @ 3. 3A   |
| Dimensions                       | 144mm(184mm with antenna)x112mmx31mm  |
| Weight                           | 1. 3Kg  |
| Housing material                 | Glass , ABS, steel plate  |
| Installation                     | Desk/wall hanging/DB Box  |
| Protection rating                | IP20  |

### 1.3 Product Description

This chapter is designed to detail the way in which the HomePlay(HDL-MZBOX-A50B.30) can be controlled, its connections, the functionality of specific buttons, and the purpose of additional module attributes.



| SN | Model Attributes            | Description   |
|----|-----------------------------|---|
| 1  | Power interface             | Working voltage:DC12—26V  |
| 2  | 4P5.08 audio output port    | Output the audio  |
| 3  | Wi-Fi Antenna               | Receive and send the signal   |
| 4  | 3.5mm audio jack            | Input the audio   |
| 5  | RJ45 port                   | LAN port  |
| 6  | WPS button: Connect button. | Press the button, then get in the HDL ON APP input the WiFi name and password, will connect to the WiFi |
| 7  | USB interface               | After insert the U disk into HomePlay, can play the music in it   |

## 2. Setup

### 2.1 Connections

HomePlay music player have 2 kinds of connections: wired connection and wireless connection. We recommend you to use wired connection because it is more stable with wired connection.

#### Wired Connection:

- 1-Connect the HomePlay network player and the router with RJ45 cable.
- 2- Connect the phone to the same router which is connected to the HomePlay network player.
- 3-Configure the HomePlay network player with HDL ON APP.



#### Wireless Connection:

- 1-Connect the device running the HDL On app to your router.
- 2-Open the HDL ON APP on your iOS or Android device, input the Wi-Fi name and password, and click next step.
- 3-Press the WPS button of the HomePlay network player, then it will connect to the corresponding Wi-Fi automatically.
- 4-The HomePlay network player will tip you if it can connect to the Wi-Fi successfully.



## 2.2 Maintenance and Warranty

The HDL (model number) module is designed to be maintenance free, and has a limited five (5) year warranty on parts from the date of installation. This warranty will not exceed the purchase price of the device in question. This warranty does not cover installation, removal, or reinstallation cost. This warranty is not valid in cases where damage was incurred due to misuse, incorrect installation, or through incorrect repair.

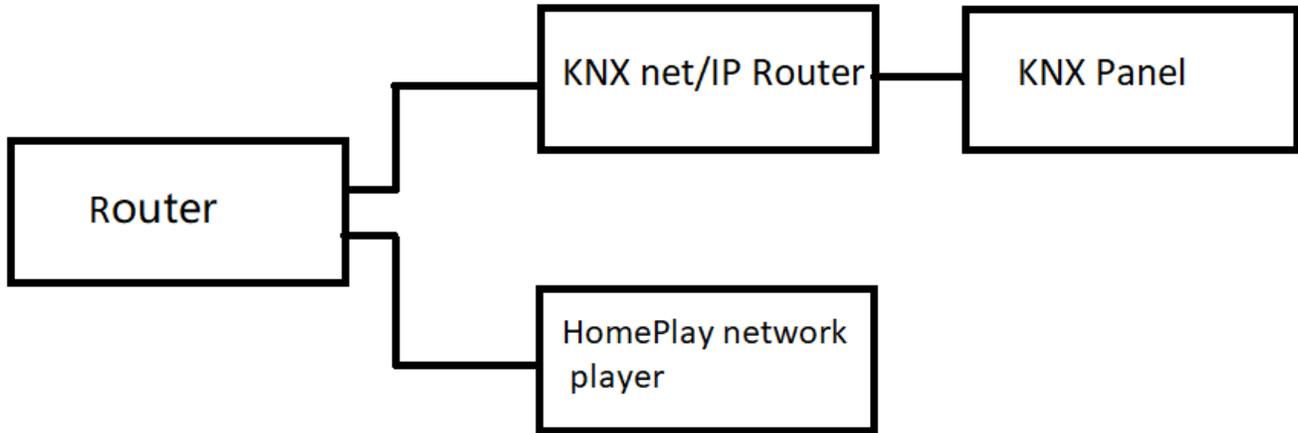
- To ensure a long service life the (model number) must be installed as per the instructions in this manual.
- The module must only be used for the purpose it was designed for.

## 3. System Configuration

### 3.1 Basic Programming

#### 3.1.1 KNX Setting

**Connection:** If you want to control the HomePlay network player by KNX panel, the HomePlay network and the KNX panel should connect to the same router. For the connection, please refer to the following wiring diagram.



**Physical address:** Fill in the physical address of HomePlay network player.

Physical address: 1 / 1 / 4

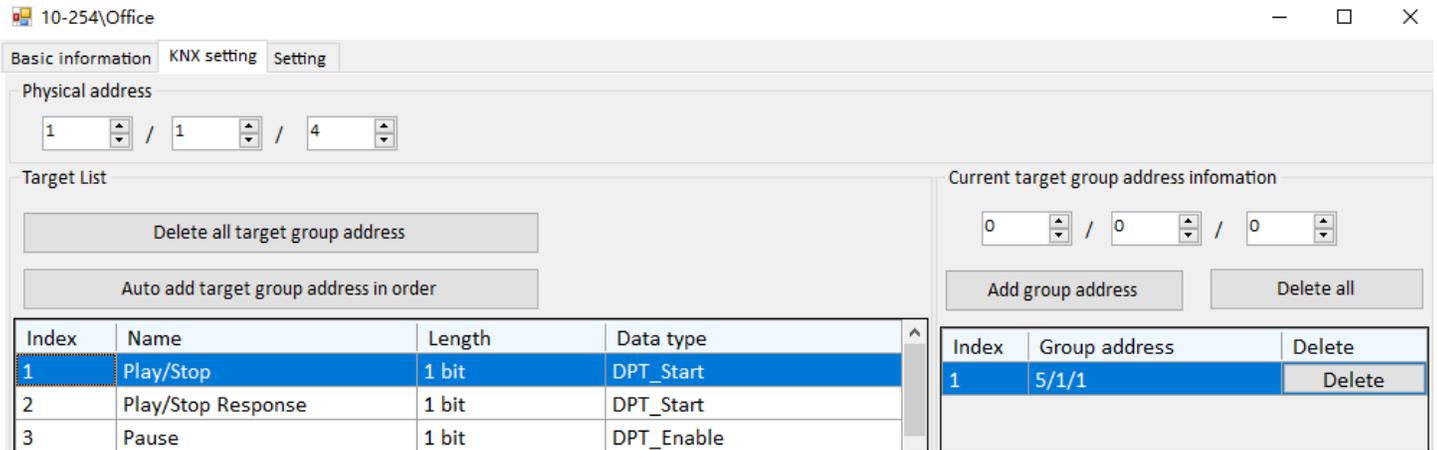
Target List

| Index | Name                            | Length  | Data type           |
|-------|---------------------------------|---------|---------------------|
| 1     | Play/Stop                       | 1 bit   | DPT_Start           |
| 2     | Play/Stop Response              | 1 bit   | DPT_Start           |
| 3     | Pause                           | 1 bit   | DPT_Enable          |
| 4     | Pause Response                  | 1 bit   | DPT_Enable          |
| 5     | Play String                     | 14 byte | DPT_String_ASCII    |
| 6     | Play String Response            | 14 byte | DPT_String_ASCII    |
| 7     | Select Source Step              | 1 bit   | DPT_Step            |
| 8     | Select Source absolute          | 1 byte  | DPT_Value_1_Ucount  |
| 9     | Select Source Response          | 1 byte  | DPT_Value_1_Ucount  |
| 10    | Select List/Tune/BlueToothLi... | 1 bit   | DPT_Step            |
| 11    | Select Song/Channel             | 1 bit   | DPT_Step            |
| 12    | Radio Search                    | 1 bit   | DPT_Step            |
| 13    | Radio Play Frequency            | 4 byte  | DPT_Value_Frequency |
| 14    | Radio Storig Frequency          | 4 byte  | DPT_Value_Frequency |
| 15    | Radio Read Frequency            | 4 byte  | DPT_Value_Frequency |
| 16    | Audio Mute                      | 1 bit   | DPT_Enable          |
| 17    | Audio Mute Response             | 1 bit   | DPT_Enable          |

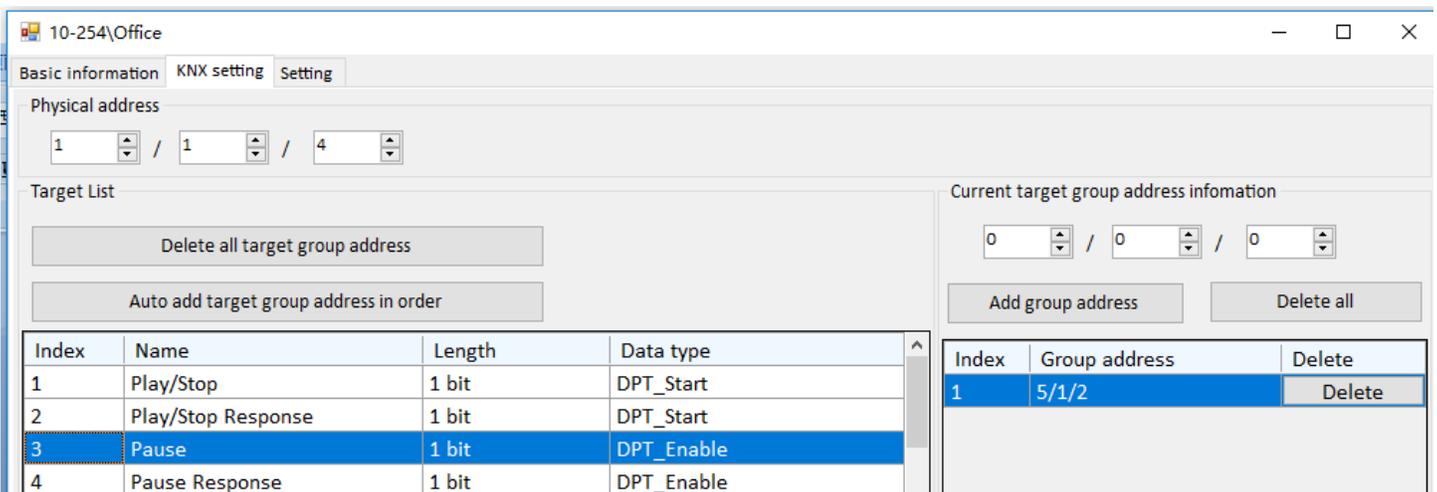
Current target group address information: 0 / 0 / 0

| Index | Group address | Delete |
|-------|---------------|--------|
| 1     | 5/1/1         | Delete |

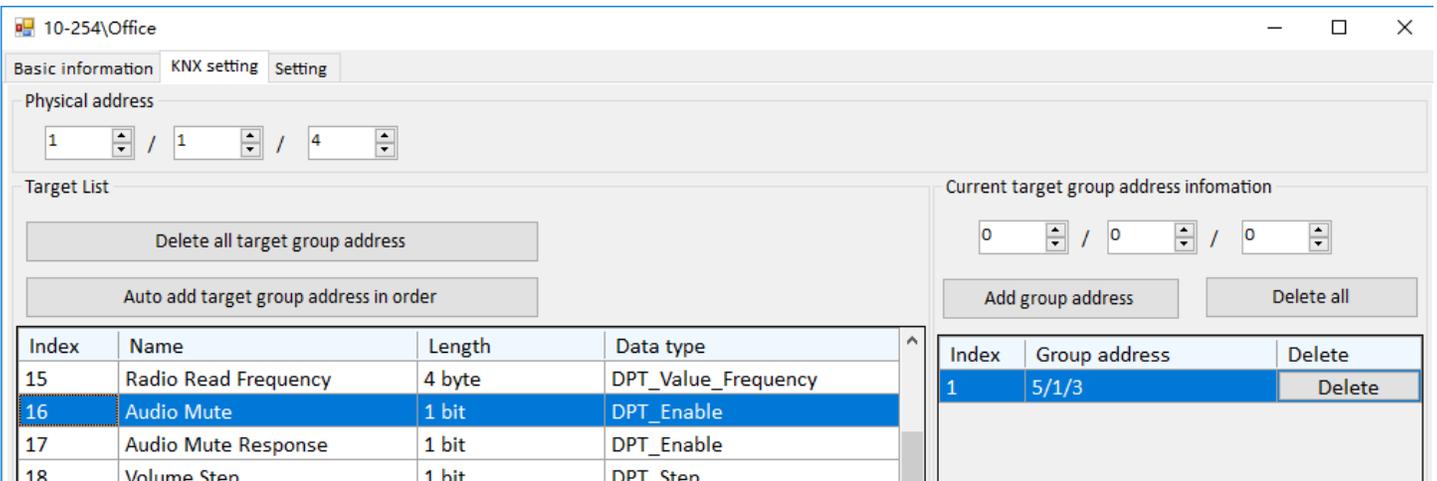
**Play/stop:** Add a group address for it, the length is 1 bit, ON command is for play, OFF command is for stop.



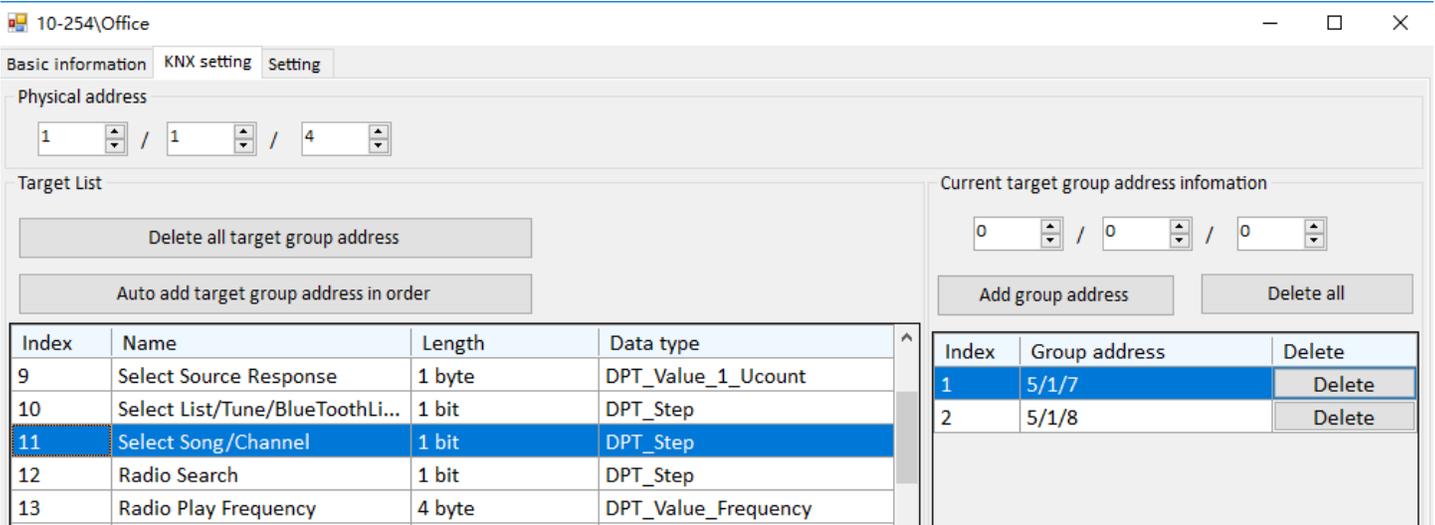
**Pause:** Add a group address for it, the length is 1 bit, ON command is for pause.



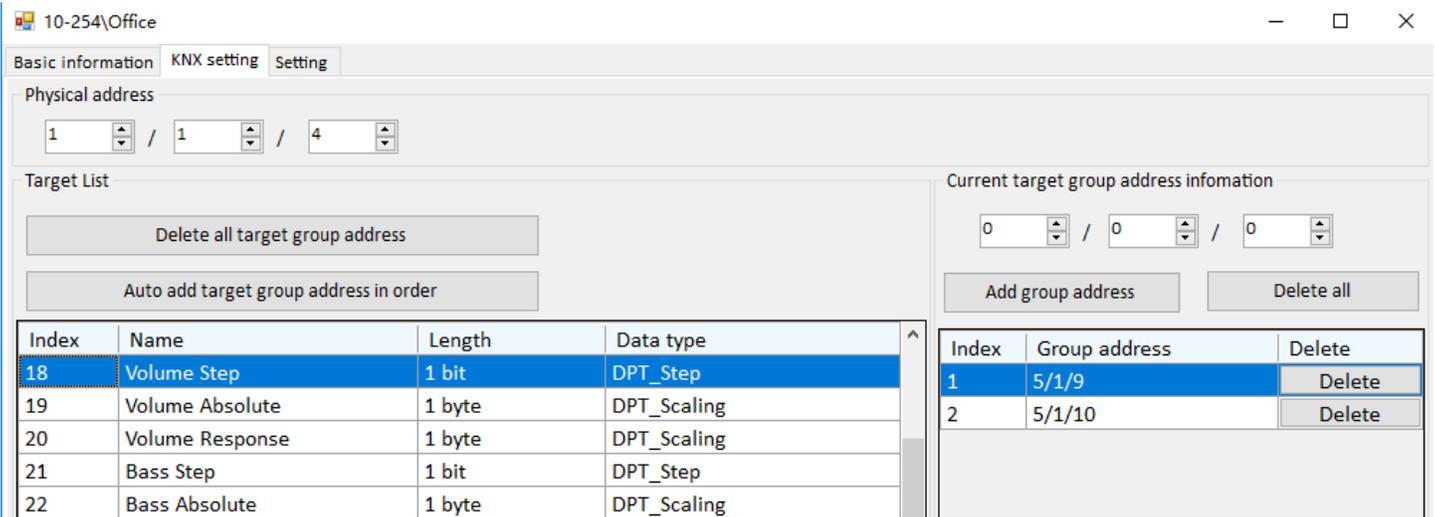
**Audio Mute:** Add a group address for it, the length is 1 bit, ON command is for mute.



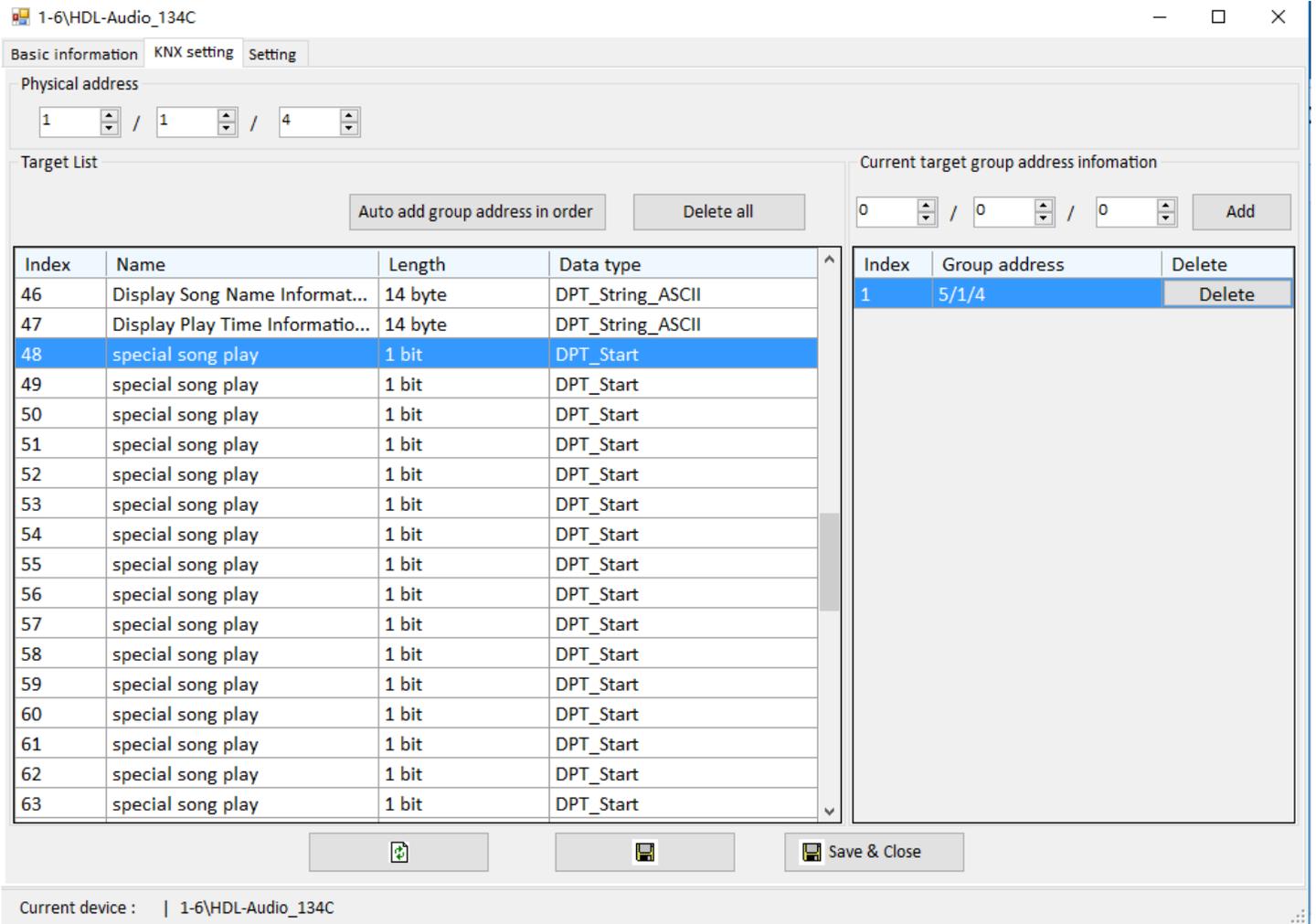
**Select Song/Channel:** Add two group address for it, one group address is for last song, the other one is for next song, ON command is for last song, OFF command is for next song.



**Volume Step:** Add two group address for it, one group address is for increasing volume, the other one is for reducing volume, ON command is for increasing volume, OFF command is for reducing volume.

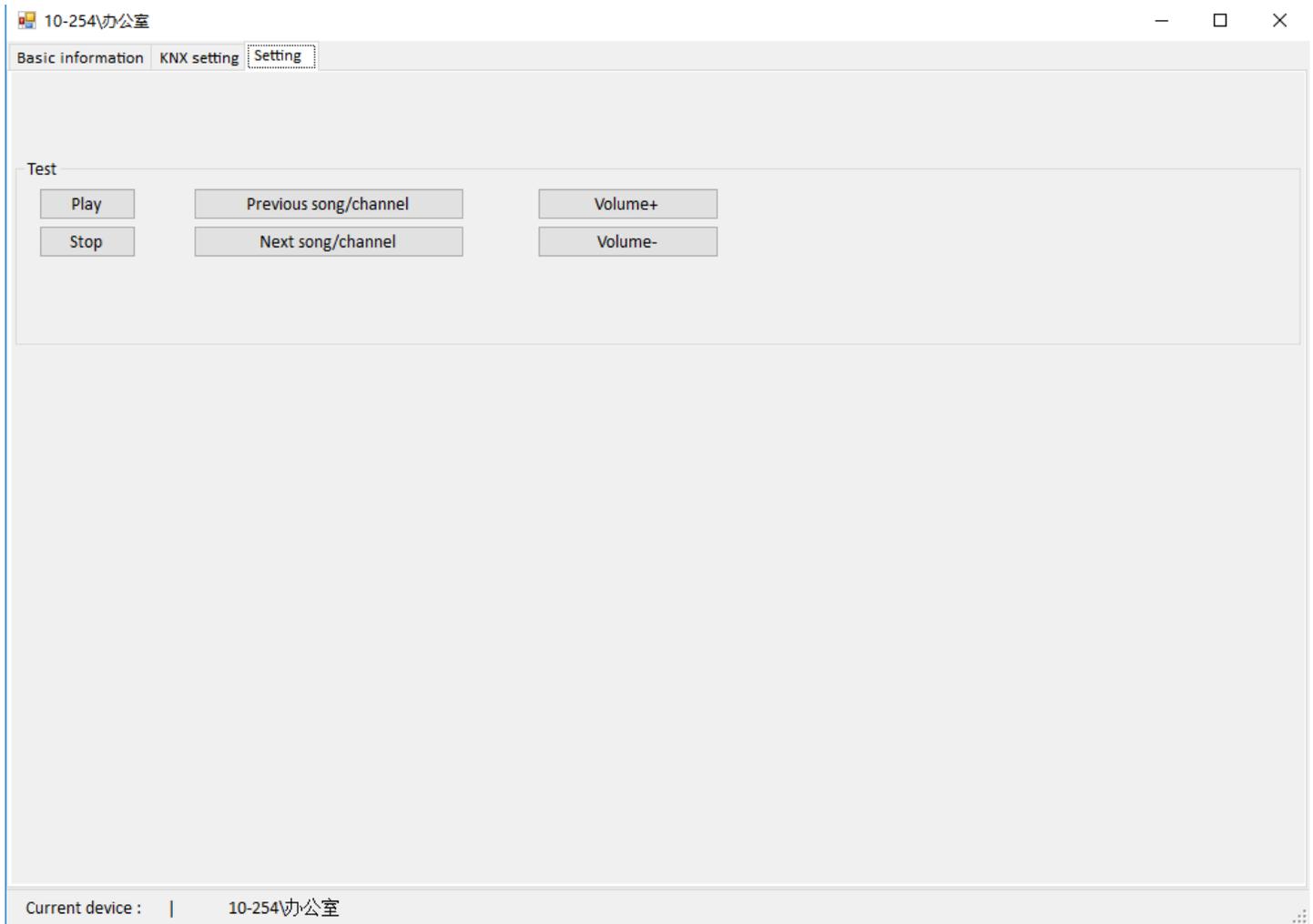


**Special Song Play:** Add a group address for it, the length is 1 bit, ON command is for playing special music. The Index 48 means special song 1, and the index 49 means special song 2, and deduce the rest from this.



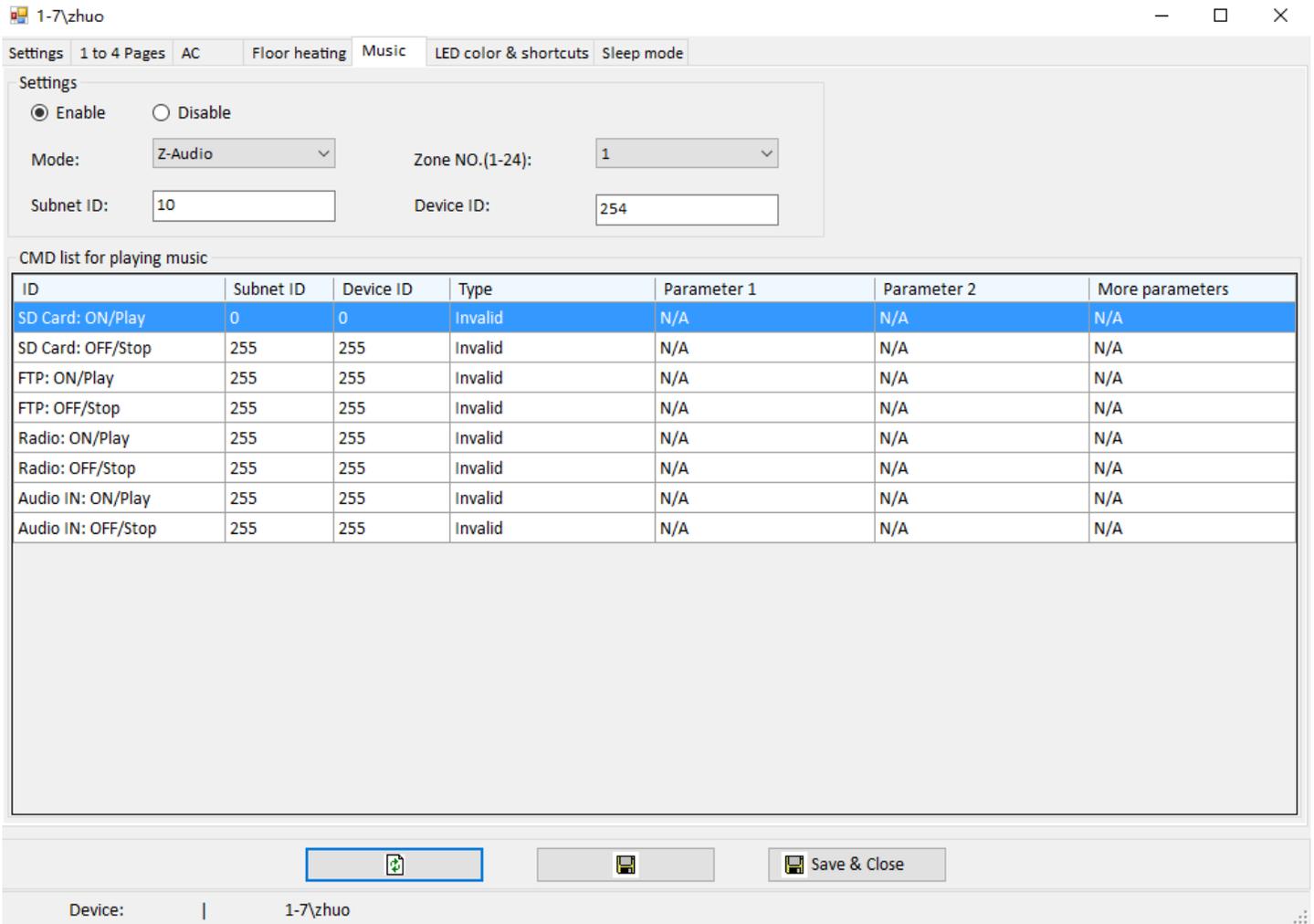
### 3.1.2 Setting

**Test:** You can test the function of play, stop, previous song, next song, volume+ and volume-.



### 3.1.3 Control the HomePlay Network Player with DLP Panel

**Music page setting of DLP:** Enable the HomePlay network player, select Z-Audio mode, Zone NO.1, and set the subnet ID and device ID. After that, you control the HomePlay network player with DLP panel. About the source of the HomePlay network player, we can select USB, NAS, AUDIO-IN and Bluetooth from DLP.



**USB:** Insert the U disk into the USB port of the HomePlay network player, change to SD-CARD source in DLP music page, then you can play the music in USB disk by DLP.

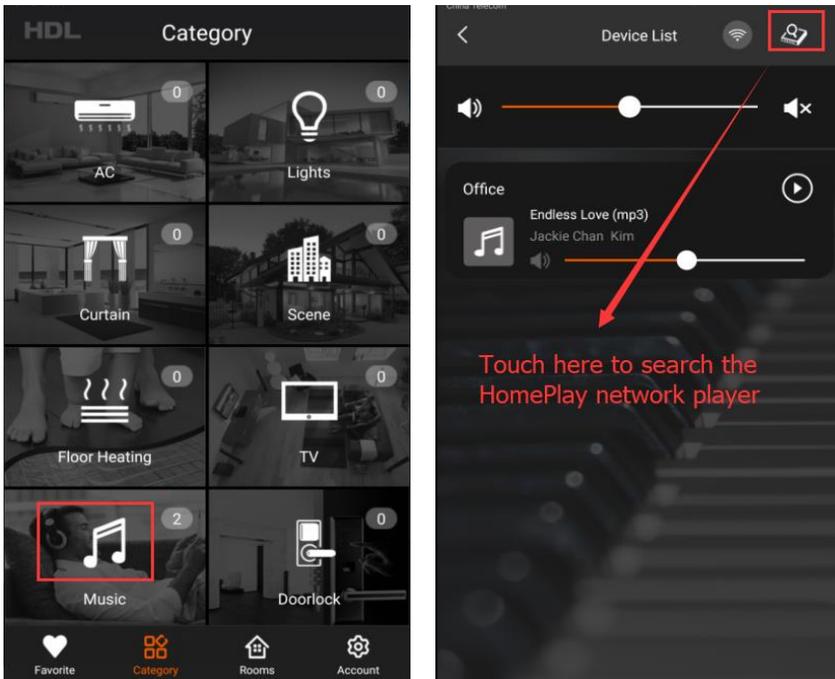
**AUDIO-IN:** Connect the music source device to line in port of the HomePlay network player, change to AUDIO-IN source in DLP music page, then you can play the music on device connect to line in port by DLP.

**NAS:** After the HomePlay network player and the other Android/iOS device connect to the same router, change to NAS source in DLP music page, then you can play the music on Android/iOS device by DLP.

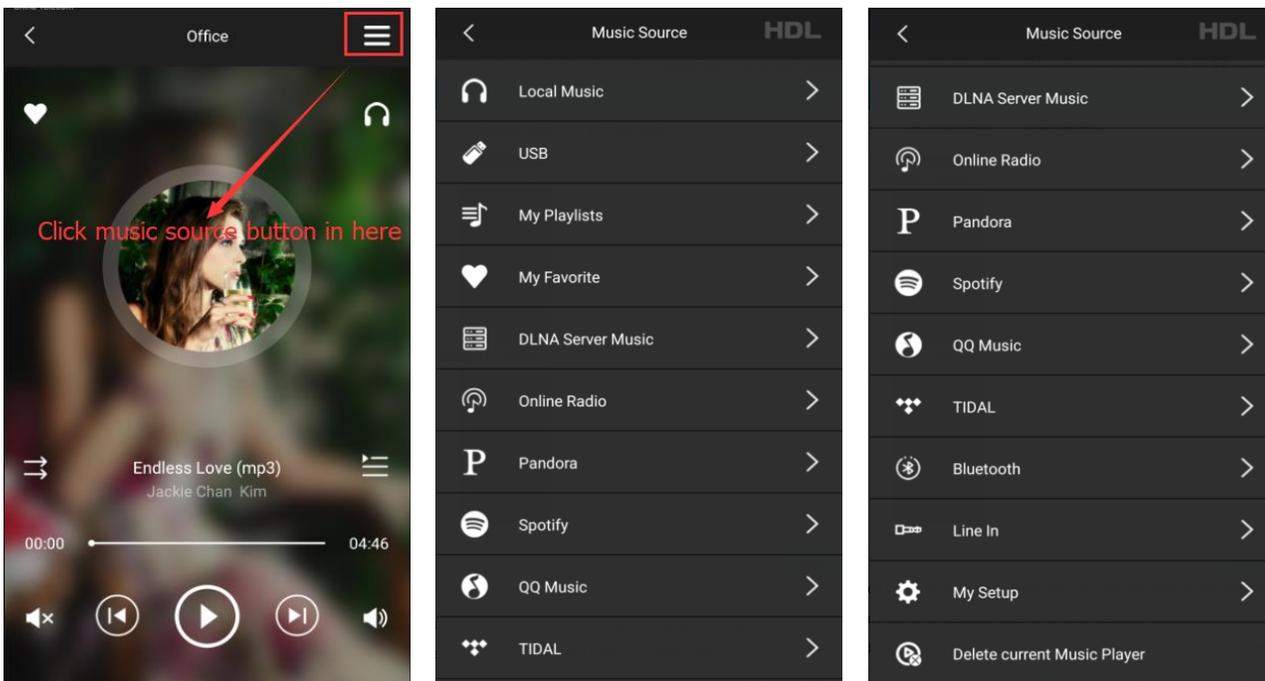
**Bluetooth:** The Bluetooth name of the HomePlay network player is HDL-Audio, you can match the HomePlay network player with the other Bluetooth device. After matching them, change to SD-CARD source in DLP music page, then you can adjust the volume of Bluetooth device by DLP.(Attention: for the Bluetooth device now only support the function of adjusting volume).

### 3.1.4 Control the HomePlay Network Player with HDL ON

1. After connecting the Android/iOS device and the HomePlay network player to the same router, run HDL ON APP, click music icon to enter music page.



2. Click the device on the device list to enter music page, click music source button to select music source.

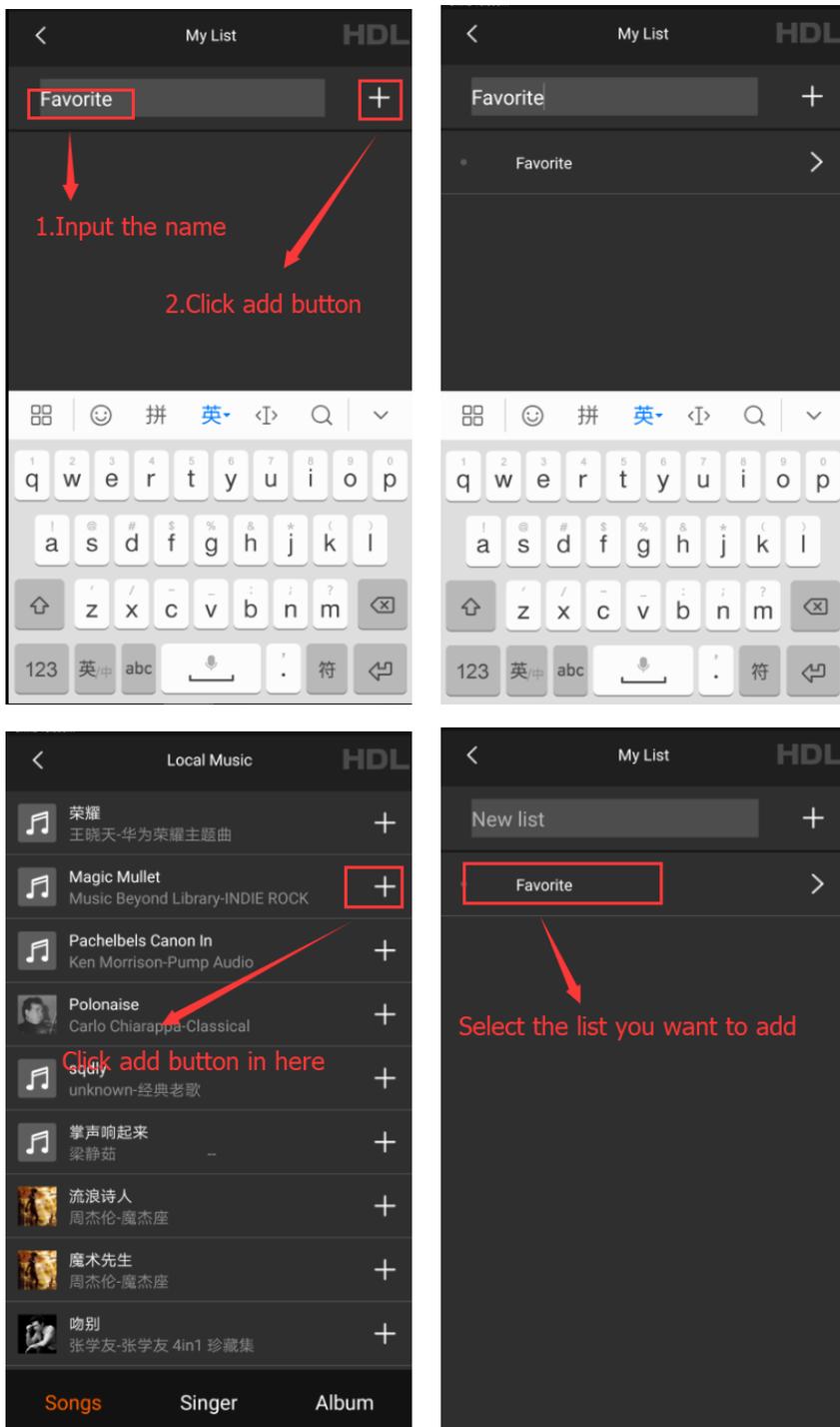


Music source include local music, USB, DLNA server music, Spotify and QQ music and so on. Now I will introduce them one by one.

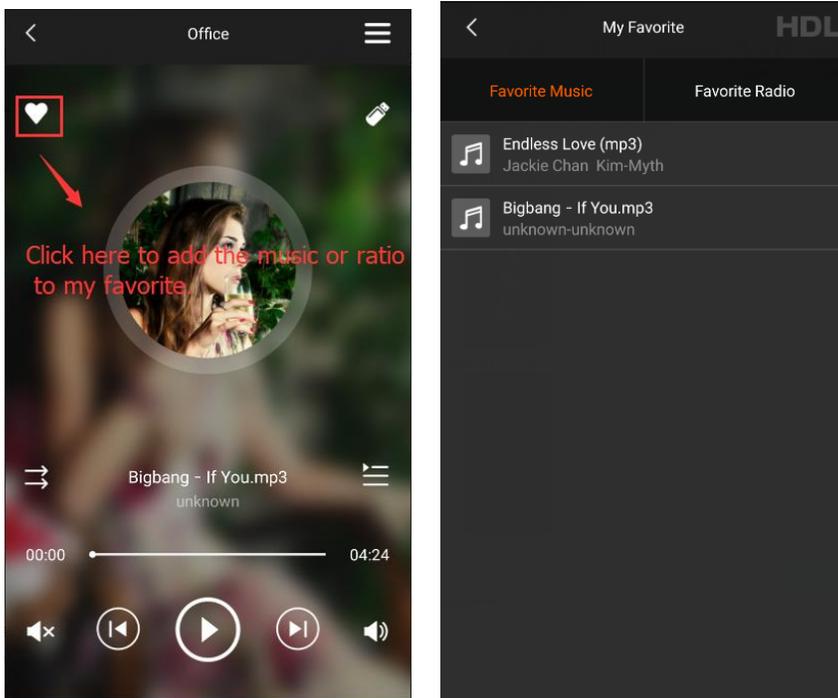
**Local Music:** The music stored in the Android/iOS device, you can play the local music after click it.

**USB:** The music stored in the U disk, you can play the USB music after click it.

**My List:** Create new list, add the favorite music to the list. You can add the music from local music and USB and so on.



**My Favorite:** You can add your favorite music and ratio to here from the music page.



**DLNA Server Music:** We can control the DLNA server music by two ways.

1. Run DLNA Server on the computer, and connect the computer and the HomePlay network player to the same router.
2. Connect the DLNA Server device and the HomePlay network player to the same router.

**Online Ratio:** You can select different ratio here.

**Pandora:** Need to install Pandora APP first, then you can play the Pandora music via HomePlay network player.

**Spotify:** Need to install Spotify APP first, then you can play the Spotify music via HomePlay network player.

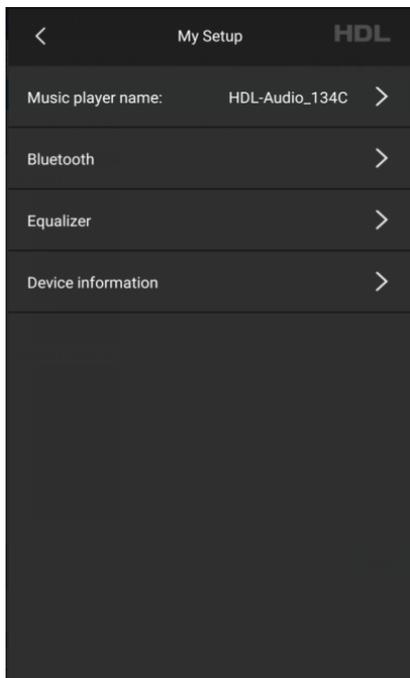
**QQ Music:** Need to install QQ music APP first, then you can play the QQ music via HomePlay network player.

**TIDAL:** Need to install TIDAL APP first, then you can play the TIDAL music via HomePlay network player.

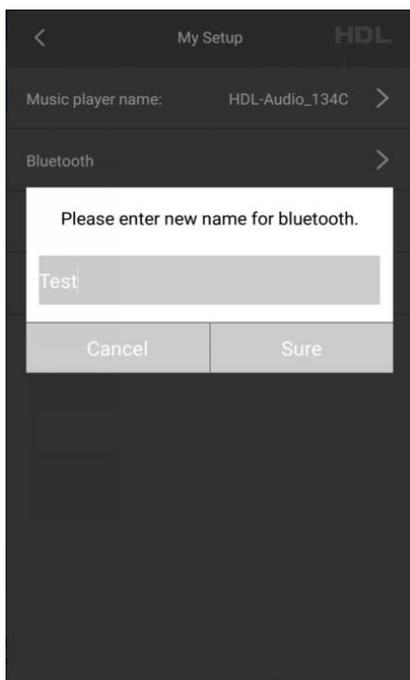
**Bluetooth:** The Bluetooth name of the HomePlay network player is HDL-Audio, you can match the HomePlay network player with the other Bluetooth device. After matching them, select Bluetooth source from HDL ON, then you can adjust the volume of Bluetooth device by HDL ON.

**Line in:** Select the Line in music, then you can play the line in music by HDL ON.

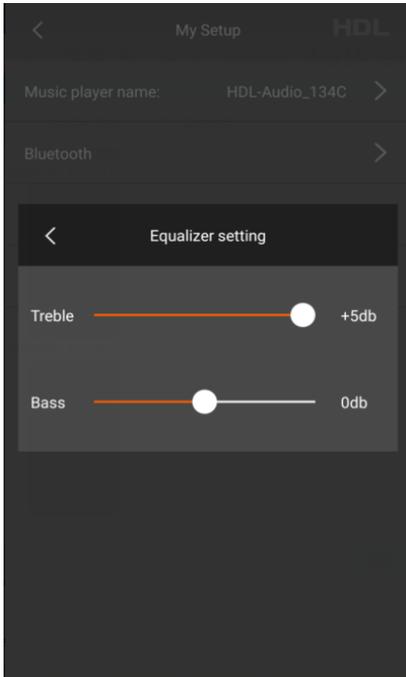
**My Setup:** In this option, we can mark the HomePlay network player, modify the Bluetooth name, adjust the treble and bass and get the device information.



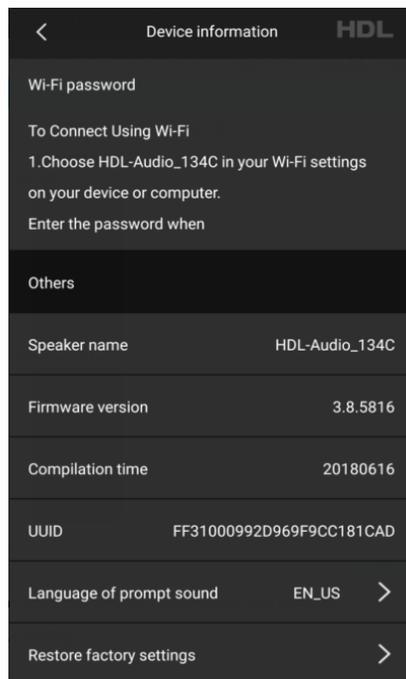
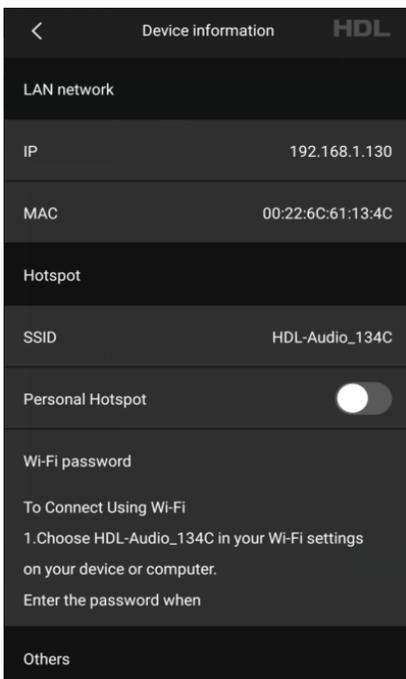
**Bluetooth:** Click the Bluetooth button and modify the Bluetooth name, need to restart the HomePlay network player after modify the Bluetooth name.



**Equalizer:** Adjust the Treble and Bass of the HomePlay network player.



**Device Information:** We can get the device information if we click this option.



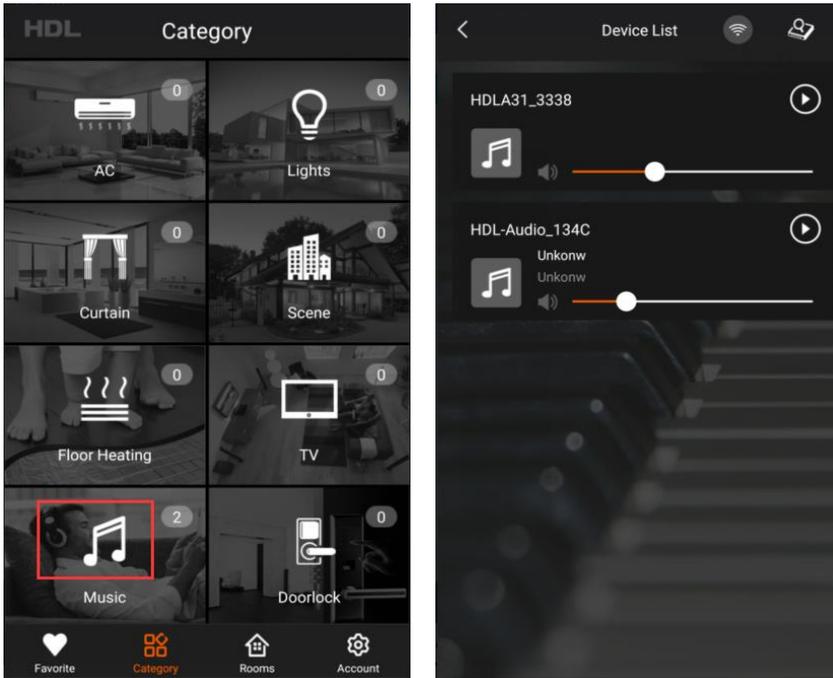
**Delete Current Music Player:** Delete the HomePlay network player from device list.

## 3.2 Advanced Programming

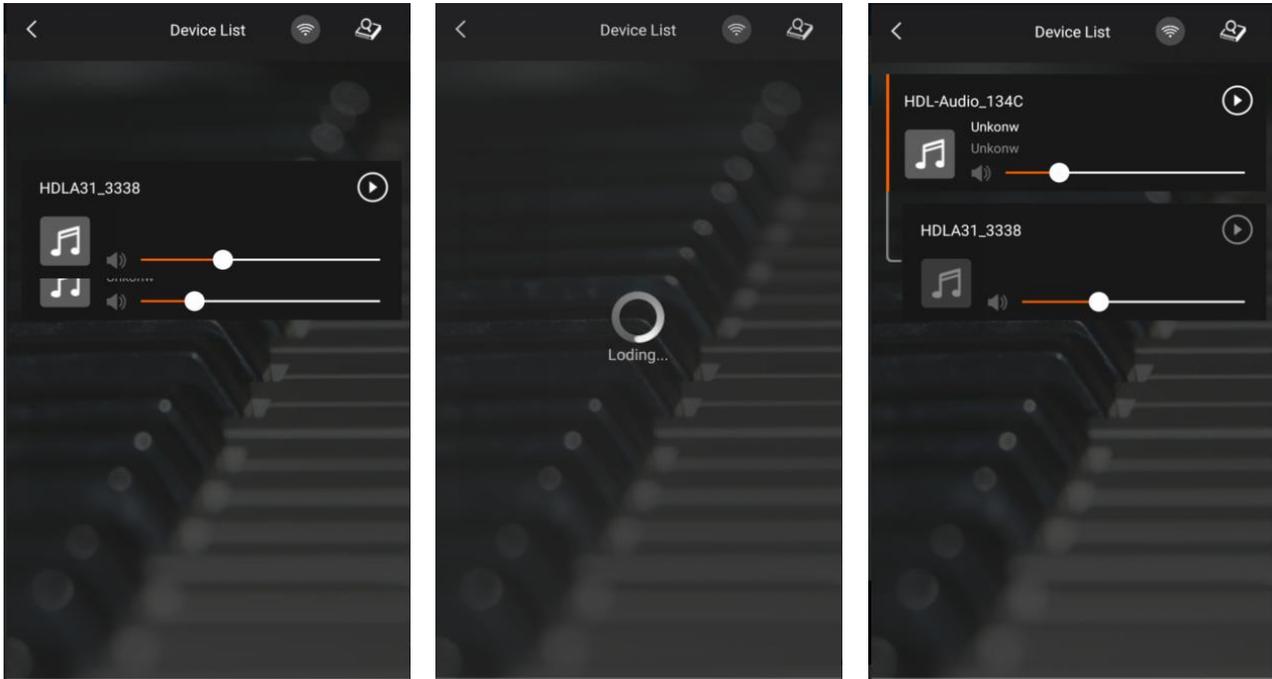
### 3.2.1 Party Mode

When there are several HomePlay network players in the system, if we want to all HomePlay network players play music synchronously, party mode can achieve to this function.

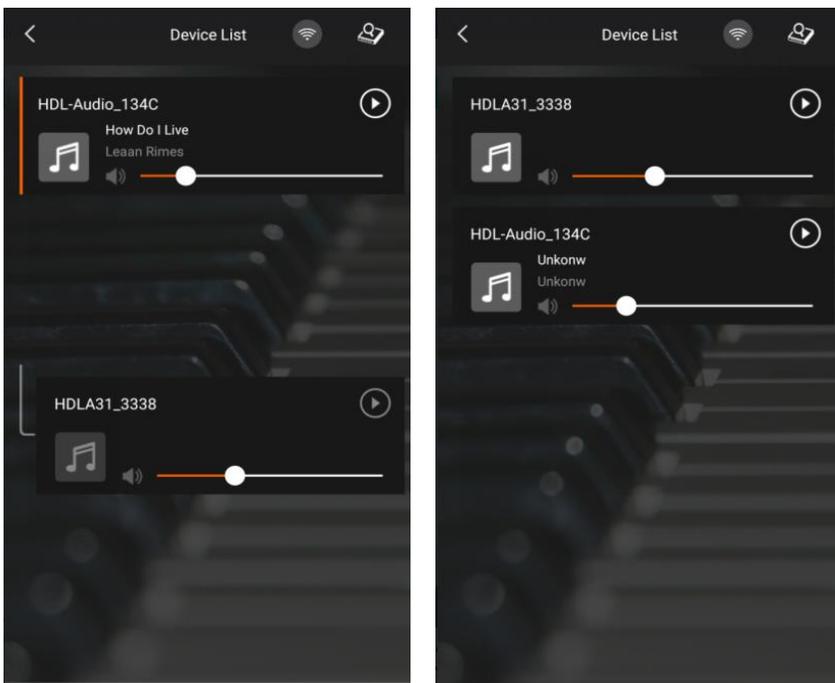
1. Run HDL ON APP, click music icon to enter music page.



2. Drag one HomePlay network player to the other HomePlay network player position, then finish the configuration of party mode. In the party mode, the slave player will follow the master player to play the same music.



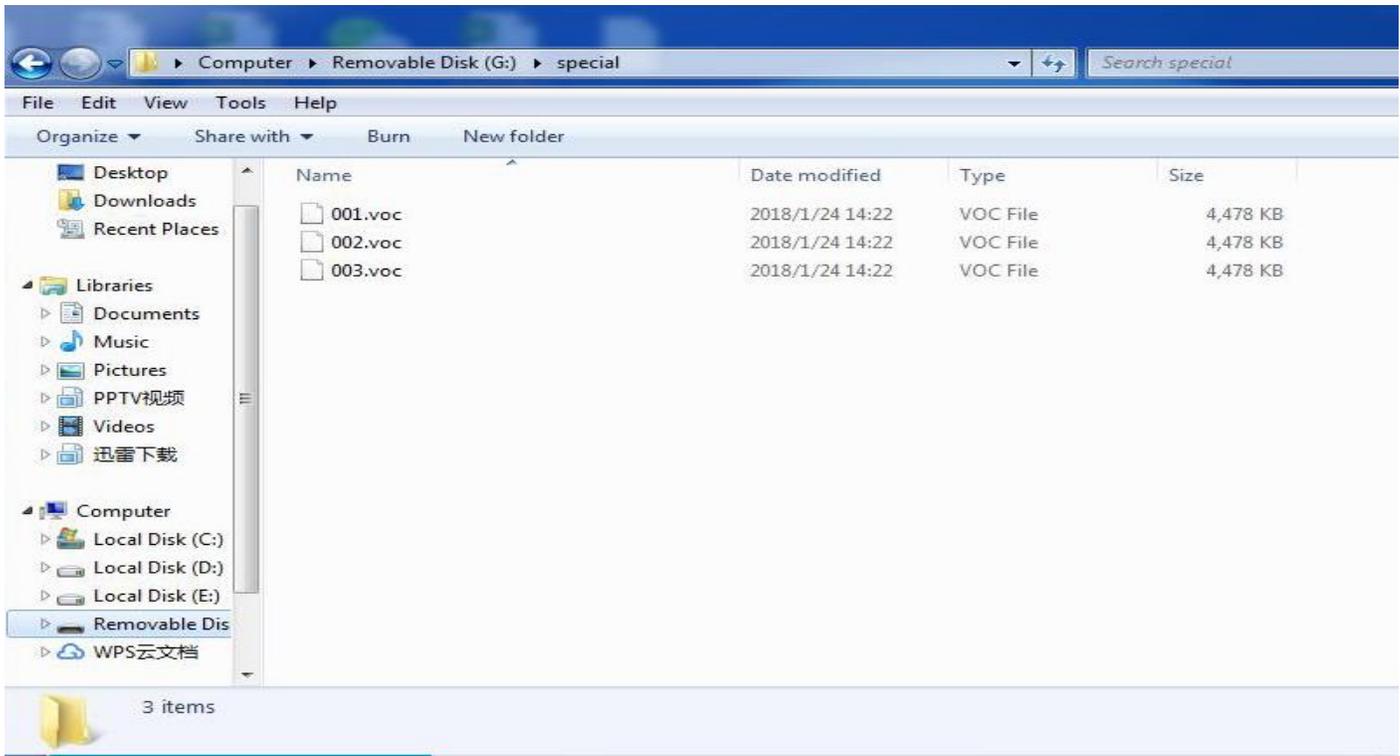
3. If you want to dissolve the group, you can drag the slave HomePlay network player out of group.



### 3.2.2 Play the Special Song

If you want to play the special song or warning tone, you can follow the next steps to achieve it.

1. Modify the suffix of audio file from mp3, wma and wav to voc, and the file name should be from 001 to 255, and put the audio files into the special folder like the below picture.



2. If we want to play the special audio, such as play the 001.voc audio, we can use the command in the below picture. The song number is corresponding to the audio name, if you want to play 002.voc, the song NO. should be 2.

Targets Configuration ×

**Basic Information**

Subnet ID: 1      Device ID: 5      Name: You Xian Mian ban2

Current selected page: 1

Current selected button: 1

Button type: Single ON      Button name:

**Targets**

Input target number:(1-1)      From 1       To 1                  

| Index | Subnet ID | Device ID | Type          | Param1      | Param2       | Param3      | Param4         |
|-------|-----------|-----------|---------------|-------------|--------------|-------------|----------------|
| 1     | 10        | 254       | Music Control | Source Play | Specify List | 1(Song NO.) | 0(Duration(S)) |

## 4. Customer Service and Technical Support

HDL is proud to provide its clientele with the very best automation products possible. If you require support from HDL, please do not hesitate to contact our Customer Service or Technical Support teams.

### Customer Service

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### Local Support

If you would prefer to speak to your local HDL representative, please visit the 'contact us' page from the HDL website (<http://www.hdlautomation.com/contact-us/>), and select your countries HDL representative from the drop down list.

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