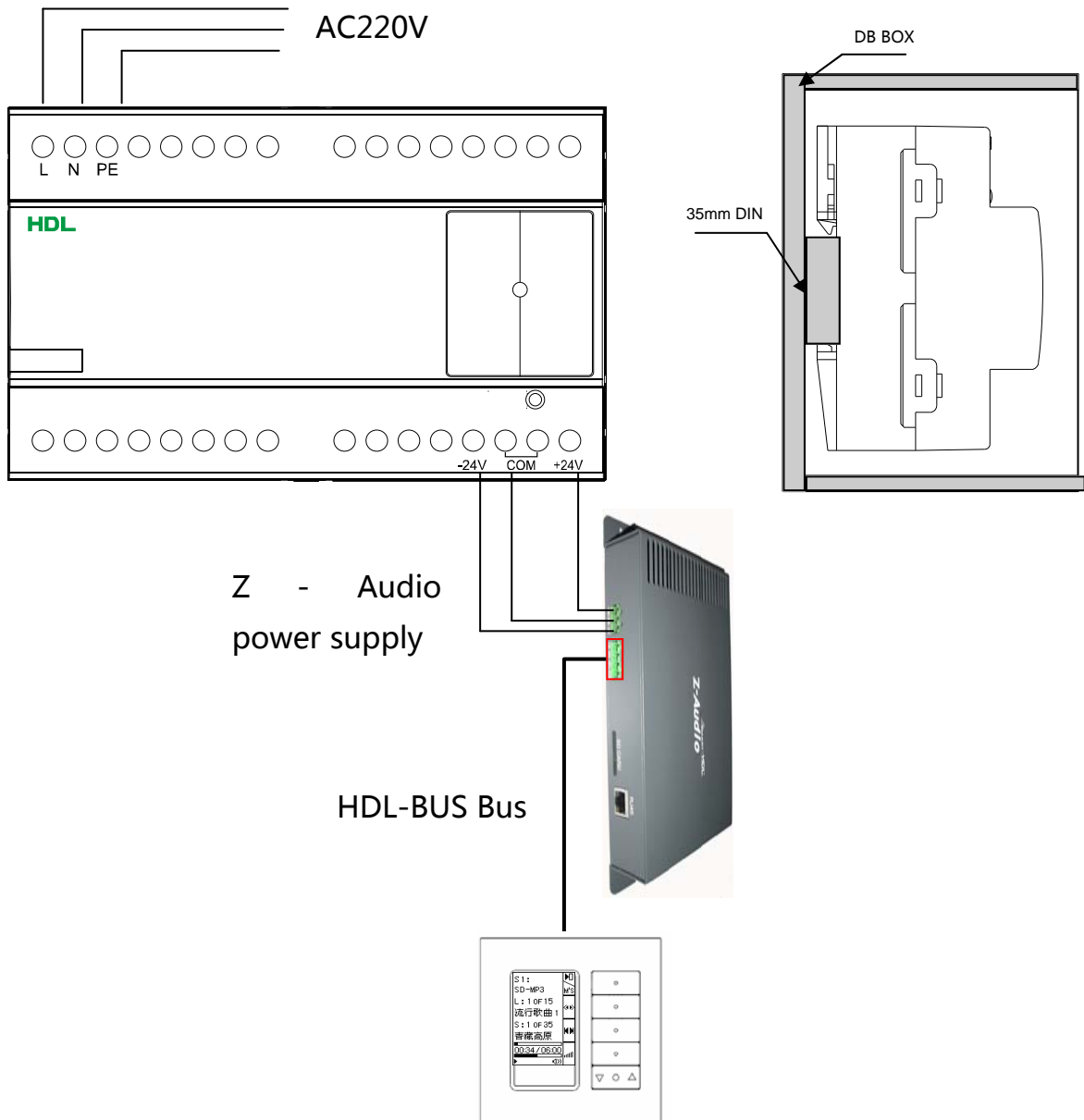
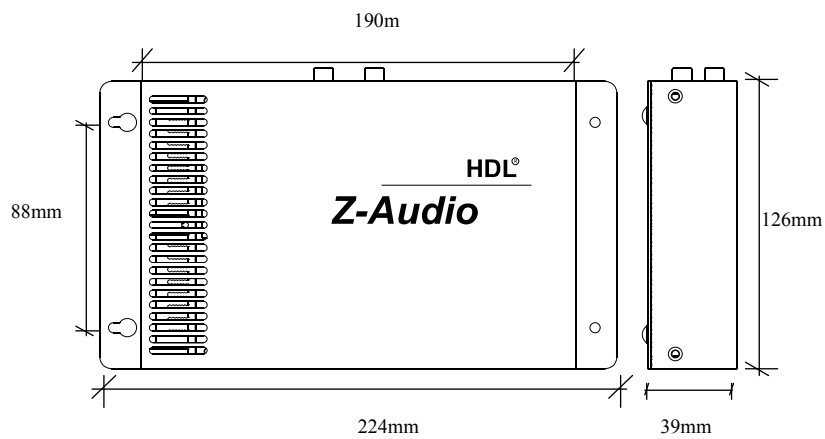


Description	Environmental conditions
<p>SB-Z-Audio digital background music player is developed by HDL, integrated with music player, FM, Voice playback and so on. User can control from LCD wall panel.</p>	<p>Working temperature : $-5^{\circ}\text{C}\sim 45^{\circ}\text{C}$ Working Relative Humidity : 20%~90% Storage temperature : $-40^{\circ}\text{C}\sim +55^{\circ}\text{C}$ Storage Relative Humidity : 10%~93%</p>
Main Function	
<ul style="list-style-type: none"> . External input . Internal SD Card . FTP Server 	<ul style="list-style-type: none"> . FM . Voice Playback . 485 Bus Communication
Performance parameters	
<ul style="list-style-type: none"> . Working Voltage : $\text{DC}\pm 24\text{V}$. Static Power : 1.6W . Signal Interface : RJ45 <ul style="list-style-type: none"> SD Card HDL-BUS RCA Audio Audio output 3 Port power input . Audio input Voltage : 0.7VPP . Input Resistance : $50\text{K}\Omega$. Output Resistance : $\text{RL} = 8\Omega$ $\text{RR} = 8\Omega$ 	<ul style="list-style-type: none"> . Output Power=$20\text{W} \times 2$. Harmonic distortion $< 0.05\%$. SNR=97dB . Frequency Range : 22Hz—20KHz . File name length : ≤ 25 Words . Music Format: MP3 . SD Volume: ≤ 8 G <p>Communication:</p> <ul style="list-style-type: none"> HDL-BUS FTP UDP <ul style="list-style-type: none"> . Dimension : 224mm×126mm×39mm

System Connection Diagram

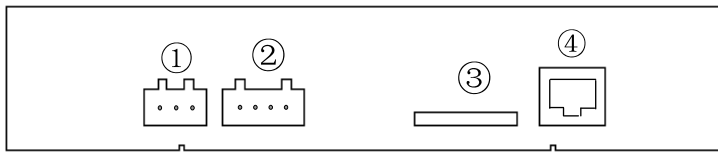


Installation Dimension



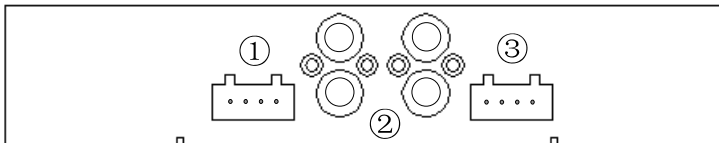
Ports

Side 1



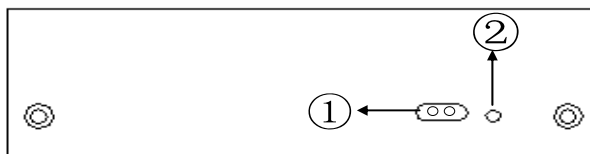
- ① +24V、 GND、 -24V : Power Supply
- ② GND、 DATA-、 DATA+、 DC24V : HDL-BUS
- ③ SD CARD
- ④ RJ45

Side 2



- ① SGND、 5V、 LIN、 ANT
 SGND、 5V : 5V Power output port
 LIN : Stand-by
 ANT : FM Antenna
- ② CD-IN、 AUDIO-OUT : RCA Audio I/O Port
 CD-IN : Audio Input Port, Connect to MP3 and CD or other Audio Device
 AUDIO-OUT : Audio Output Port (No amplifier)
- ③ R+R-L+L- :
 R+R- : Right channel(with amplifier), Connect to 8Ω Speaker
 L+L- : Left channel(with amplifier), Connect to 8Ω Speaker

Side 3



- ① indicator LED: Working signal and function LED
 Left is working signal LED: Green LED Flicker when working
 Right is function LED: Green LED flicker when reset and Upgrade
- ② upgrade and reset hold:
 - . Use for Upgrade when not working
 - . Use for reset when working

Press 10s to function LED on, two LED on when release and then to default set.

Default IP: 192.168.10.250 IP Port: 6000

Device IP and FTP IP must be in same network if user use FTP server(Example : Zone Audio default IP: 192.168.10.250, FTP Server must be 192.168.10. XXX

Function in Details

Voice playback

Will create a SPECIAL file when SD card format to Fat32, User can record voice in MP3 format, and play via HDL universal switch mode

Setting from Smart-Bus Programming software

Basic information:

Subnet ID: range from 000 to 254

Device ID: range from 000 to 254

IP : IP address and can be modified

Modify subnet and device ID according MAC code: input new ID and save

Music play setting:

Show SD card file, Without setting

Function select and FM setting

Including 7 options(3options are stand by), can be audio source after select

SD-card : play the music that in SD Card

NAS-Hdd : FTP Server

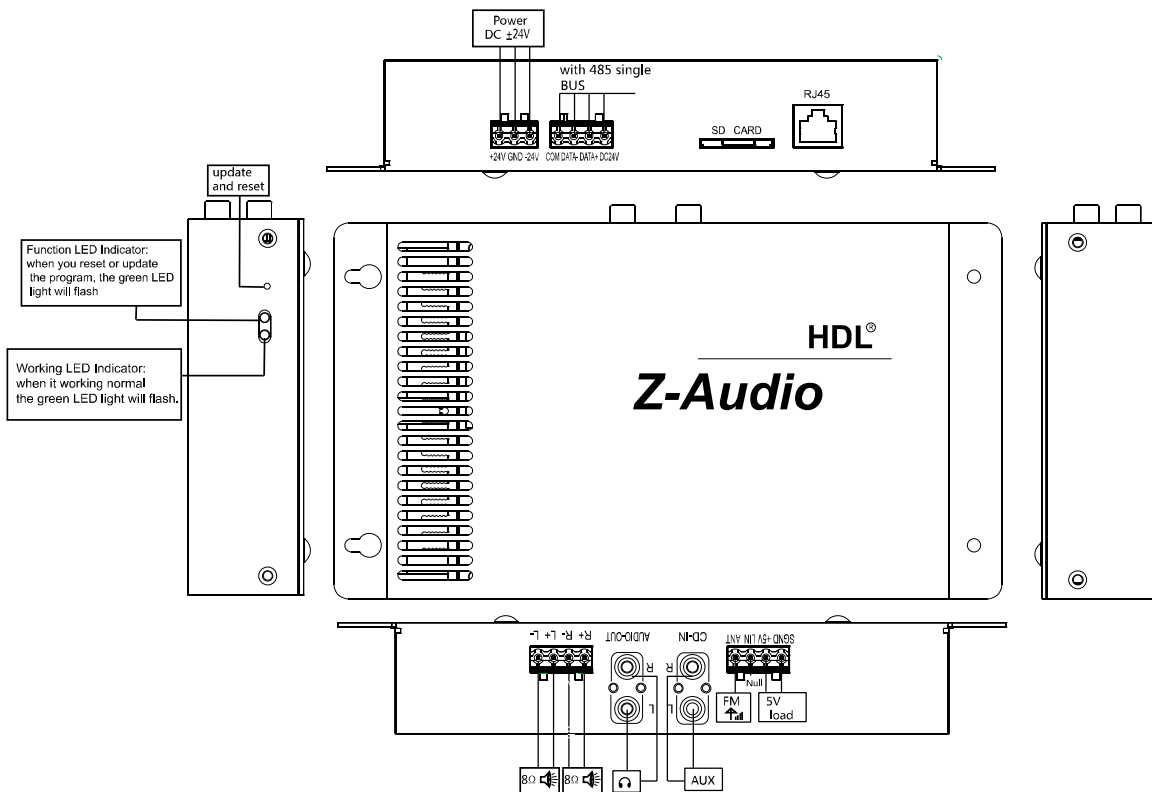
Radio : FM

Audio-in : external audio device

Playlist:

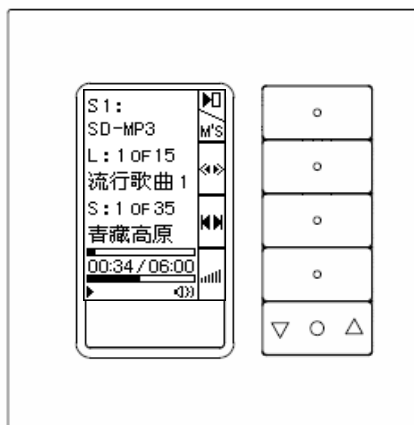
Can set 25 frequencies as audio source and control output by LCD wall panel

Connection



LCD Wall Panel setting and control

Search LCD wall panel from programming software and open the music page, set Subnet and device ID



First: left select audio source and long press left button to set page

Second: select list

Third: select song

Fourth: volume adjust

Fifth: page convert

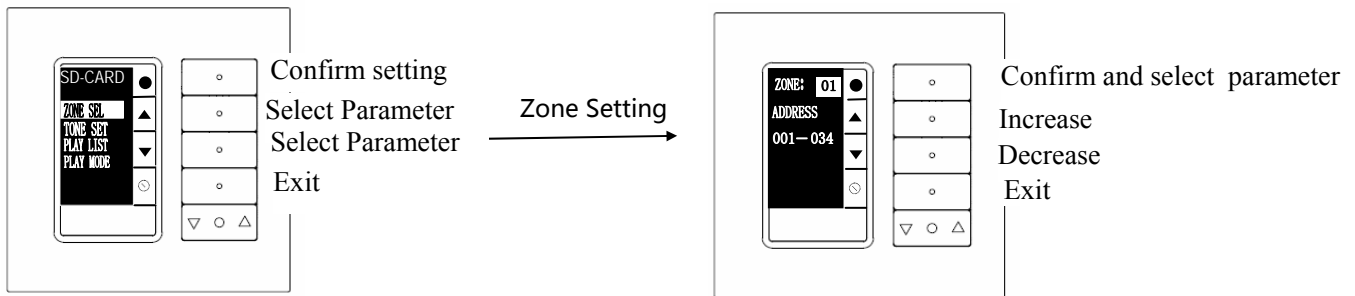
Above picture is take SD audio source as example,

FTP operation is same with SD source,

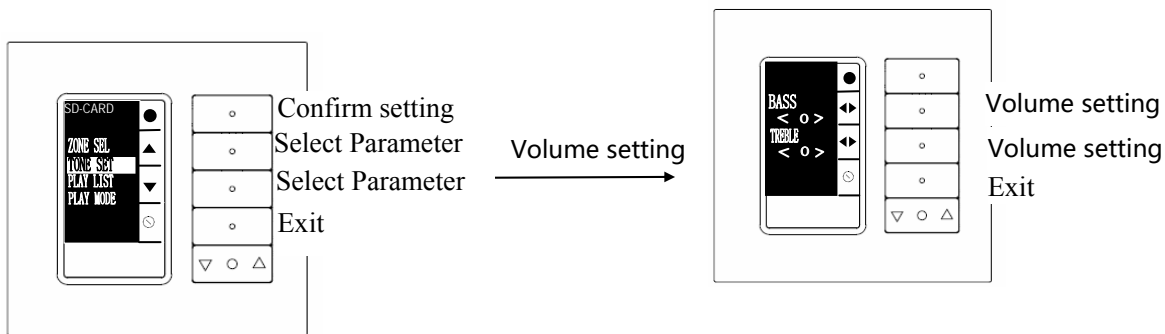
FM as audio source, second button for select frequency, automatically select under long press .

Third button is for FM to select 25 channels

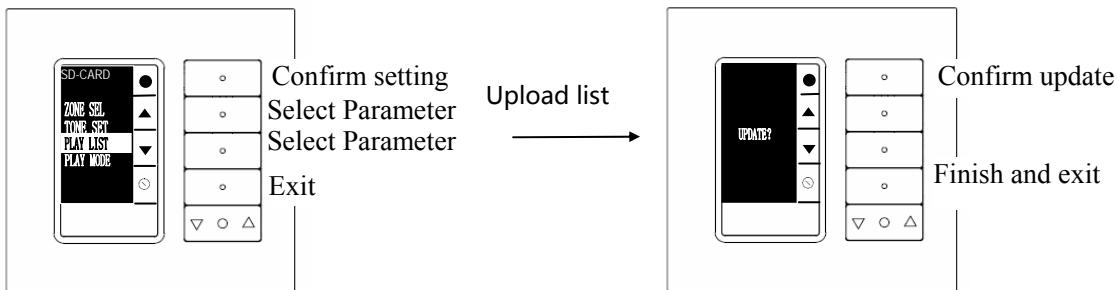
Zone setting: Default Zone No is 1(no modification)



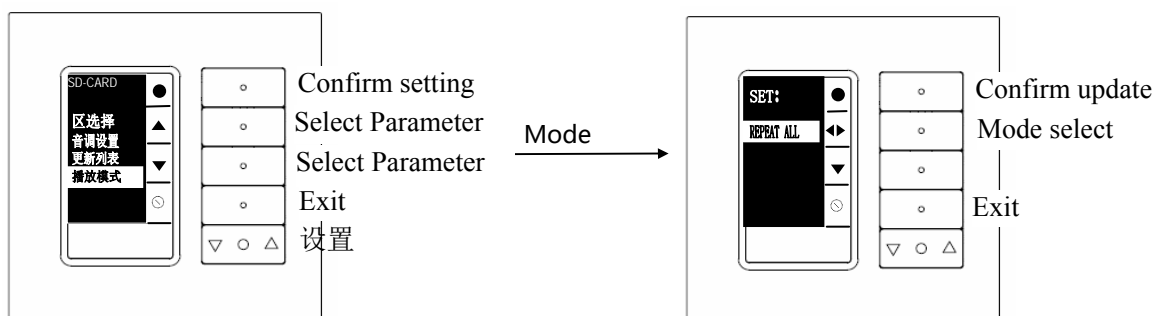
Volume setting: high and low



Update list: need to update when delete or upload songs



Mode: play all, single play, repeat once and order



Universal switch control

How to play songs use UV switch

UV switch can be used to play songs.

First: select a play list

Second: select a song in play list

Third: Play or not.

1. UV switch NO 1-149
ON: means select a song in play list (Song No: 1-148)
OFF: do nothing
2. UV switch No 150-200
150: Voice playback
ON: means select a play list (play list No 0-50)
OFF: do nothing
3. UV switch NO 201
ON: Play
OFF: Stop
4. UV switch NO 202
ON: Stop All
OFF: do nothing
5. UV switch NO 203 Select a play list
ON: Next
OFF: Pre
6. UV switch NO 204 Select a song
ON: Next
OFF: Pre
7. UV switch NO 205 Volume adjustment
ON: UP
OFF: DOWN
8. UV switch NO 206 Treble adjustment
ON: UP
OFF: DOWN
9. UV switch NO 207 Bass adjustment
ON: UP
OFF: DOWN
10. UV switch NO 208
ON: Play music on SD card
11. UV switch NO 209
ON: Play music on FTP server
12. UV switch NO 210
ON: Radio
13. UV switch NO 211
ON: Audio-in

14 :		
215	-----	Volume 76(Minimum)
15 :		
216	-----	Volume 66
16 :		
217	-----	Volume 50
17 :		
218	-----	Volume 39
18 :		
219	-----	Volume 28
19 :		
220	-----	Volume 20
20 :		
221	-----	Volume 15
21 :		
222	-----	Volume 10
22 :		
223	-----	Volume 5
23 :		
224	-----	Volume (Maximum)

Some tips and rules for universal switch:

Play Voice playback:

- 1 : send universal switch 208, ON(Select Audio source)
- 2 : send universal switch 150, ON(Select List)

3 : send universal switch 1-149, ON(Select the number that at front of song)

Stop Voice playback:

1 : send universal switch 1-149, OFF (Select Song)

SD Play:

1 : send universal switch 208, ON(Select Audio source)

2 : send universal switch 151 ~ 200 , ON (Select 1 ~ 50 play list)

3 : send universal switch 1 ~ 149, ON (Select song to Play)

SD Stop:

1 : send universal switch 208, ON(Select Audio source)

2 : send universal switch 151 ~ 200, ON (Select 1 ~ 50 play list)

3 : send universal switch 1 ~ 149, OFF (Select song to stop)

FTP Play:

1 : send universal switch 209, ON(Select Audio source)

2 : send universal switch 151 ~ 200 , ON (Select 1 ~ 50 play list)

3 : send universal switch 1 ~ 149, ON (Select song to Play)

FTP Stop:

1 : send universal switch 209, ON(Select Audio source)

2 : send universal switch 151 ~ 200 , ON (Select 1 ~ 50 play list)

3 : send universal switch 1 ~ 149, OFF (Select song to Stop)

RADIO Play:

1 : send universal switch 210, ON(Select Audio source)

2 : send universal switch 201, ON(play)

RADIO Stop :

1 : send universal switch 210, ON(Select Audio source)

2 : send universal switch 201, OFF(Stop)

AUDIO-IN Play:

1 : send universal switch 211, ON(Select Audio source)

2 : send universal switch 201, ON(play)

AUDIO-IN Stop :

1 : send universal switch 211, ON(Select Audio source)

2 : send universal switch 201, OFF(Stop)

Cautions

- 1、 LED flicker every 1.5S when working properly, also flicker every 0.1S when upload list.
- 2、 firstly should check hardware work properly(flicker every 1.5S) when cannot find device from software, if not work stilly, reset the IP, default is 192.168.10.250, and the PC IP should be 192.168.10.*
- 3、 SD card must be format to FAT32
- 4、 Device restart after 5S when Network IP and FTP modified, in this period, operation is not recommended.
- 5、 Only support MP3 and song name cannot exceed 25 words
- 6、 SD support 47 play list and each play list can support 999 songs. FTP support 48 play list and each play list can support 999 songs
- 7、 Voice playback song name must have numbers in front, such as 001lock.mp3.
- 8、 Must insert SD card when FTP was selected as audio source.

FTP Format type and file code type

No	Server Name	Type	File format
1	Ms-dos	IIS	ASCII
2	unix	Server-U	UTF-8
3	HomeFtpServer	Server-U	ASCII
4	FileZilla Server	Server-U	ASCII
5	Server-U		
6			