β³ ®

Beta Three

S1200Na

CONTENTS

S1200Na

PRODUCT FEATURES

▫ Two transducers 2.1 way full range plastic speaker, coaxial components, computer simulation design.

▫ Compact, high sensitivity, big power active full range plastic speaker.

▫ All transducers with horn loading.

▫ Built in DSP amplifier, all parameters of speaker can be precisely adjusted according to user's own style through RS-232,RS-485,USB connector with computer.

▫ 60° x 60° dispersion .

▫ Used for applications of full sound field reinforcement, bar and some public venues.

▫ Suitable for any sound reinforcement, monitor and sound compensation of big installation project or living performance event.

SPECIFICATION

Components:	LF:12"× 1 MF:12"× 1 HF:1× 44mm
Frequency Response (-3dB)	45Hz-20kHz
Input Sensitivity	Line 1.25V
SPL(1m)	126dB
Max. SPL(1m)	132dB
Amplifier Power	300W +300W
Input Impedance	Balanced 20K , Unbalanced 10K
Range For Volume	± 12dB
Dispersion (H x V)	60°× 60°
Crossover Point	LF: 200Hz MF/HF:3 kHz
THD	3
Input/Output Connectrors	input:XLR J3P output:XLR K3P
Power supply	AC 230V, 50Hz/60Hz
Net Weight	28kg
Gross Weight	32kg
Dimensions(W x H x D)	416× 423× 721mm
Packing Dimensions(W x H x D)	485× 485× 792mm

S1200Na

FREQUENCY RESPONSE

PHASE RESPONSE

S1200Na

WATERFALL

THD

Frequency Response — — — 2nd Distortion ——— 3rd Distortion

3
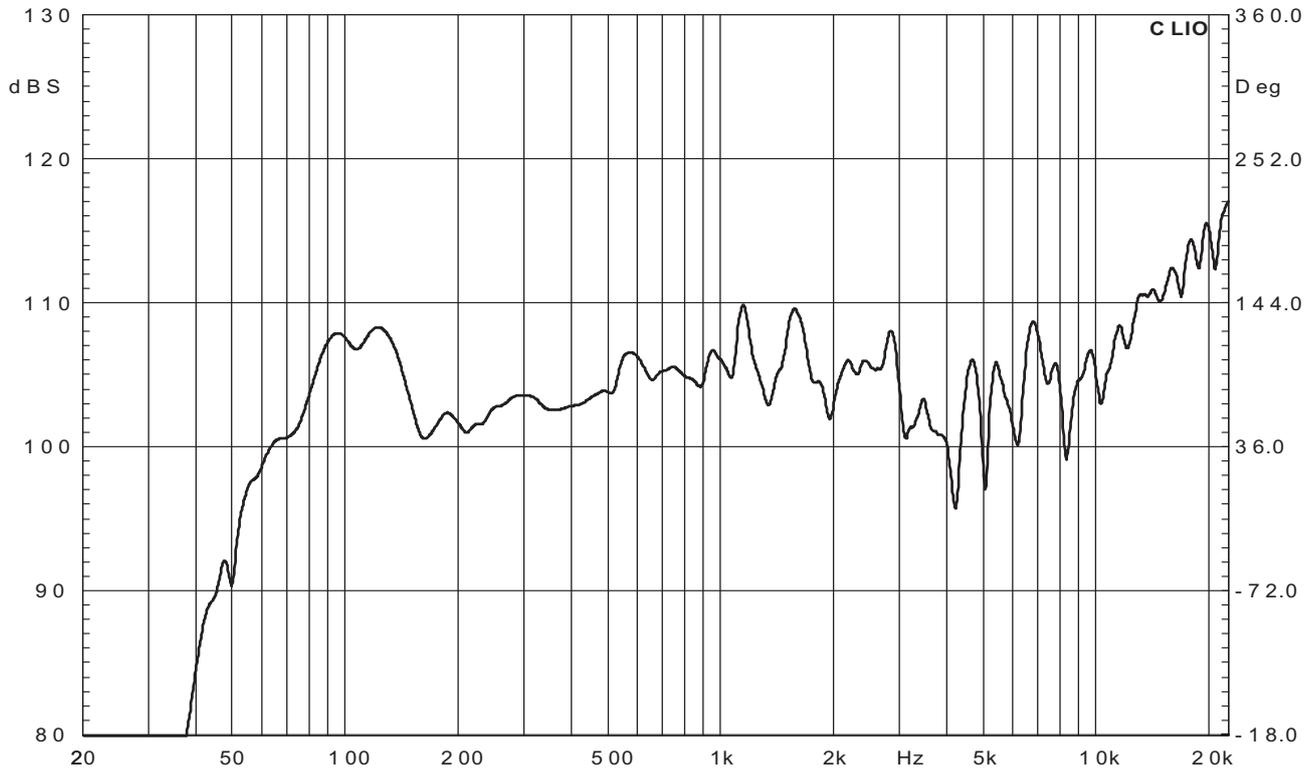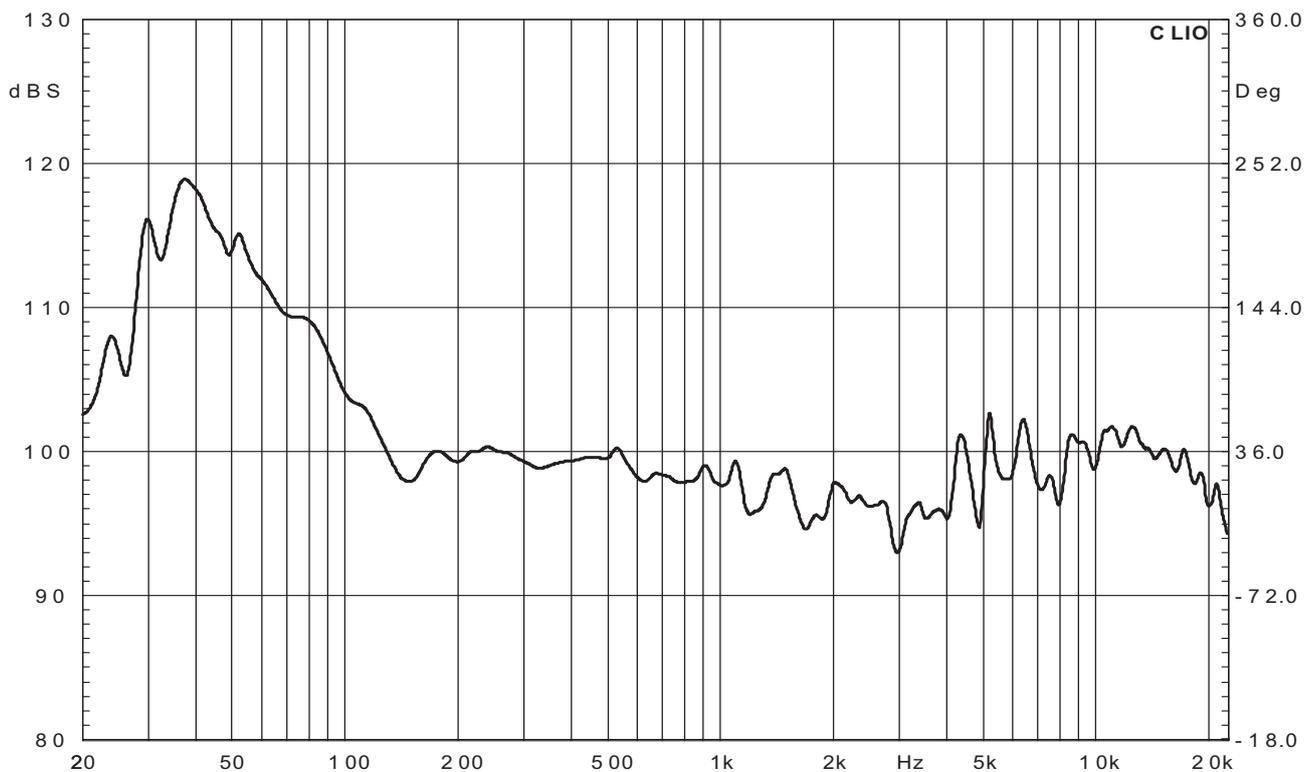
HORIZONTAL DIRECTIVITY
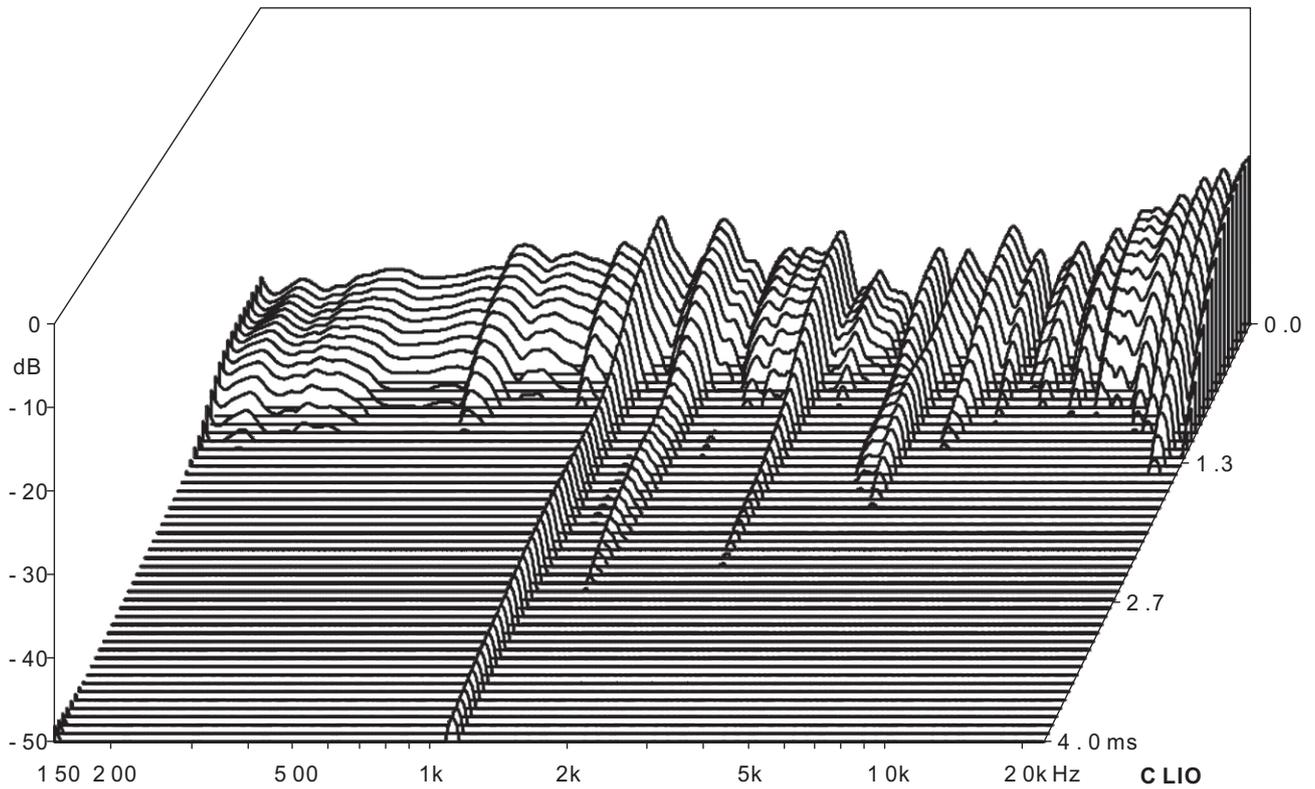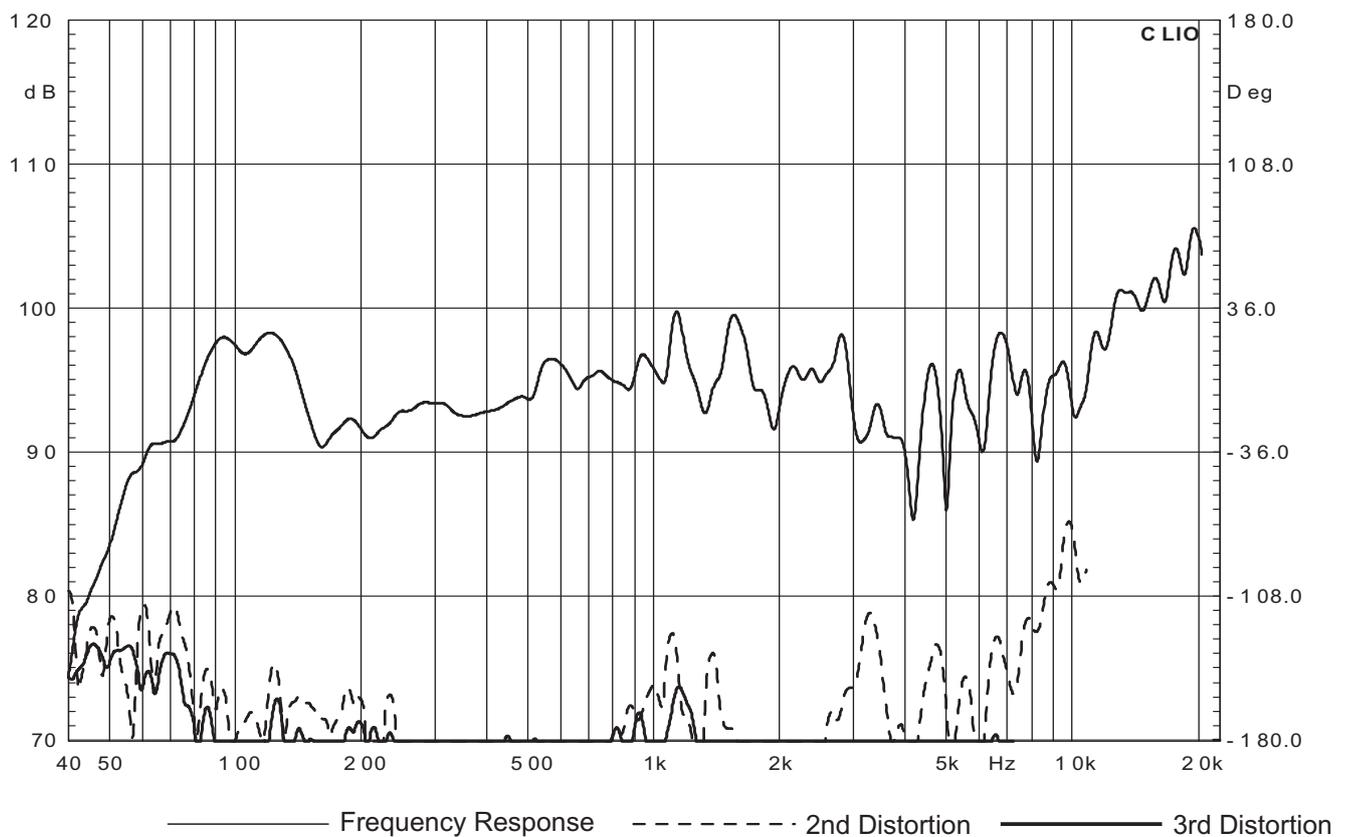
The data of S1200Na horizontal directivity were collected by testing the speaker system in a big anechoic chamber.
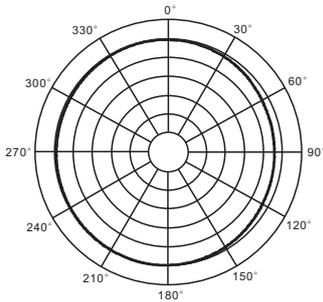
100Hz

160Hz

200Hz

400Hz

630Hz

1.0kHz

1.6kHz

2.5kHz

3.15kHz

6.3kHz

10kHz

16kHz

The scale is stepped by 6dB increment.

S1200Na
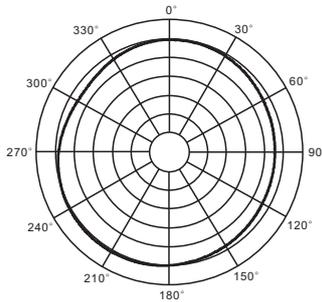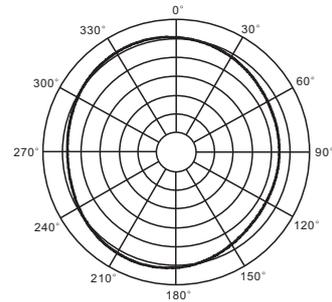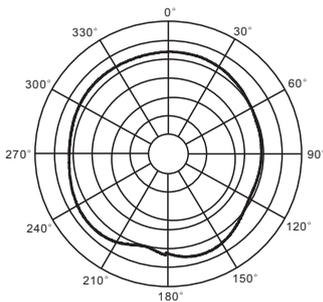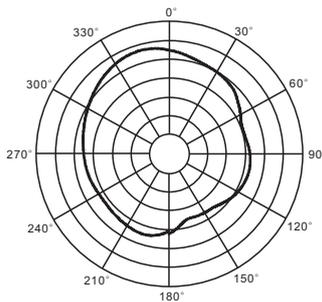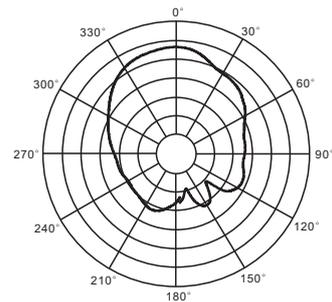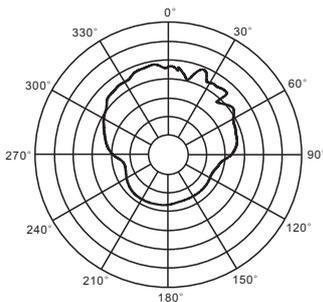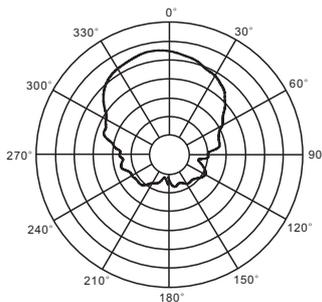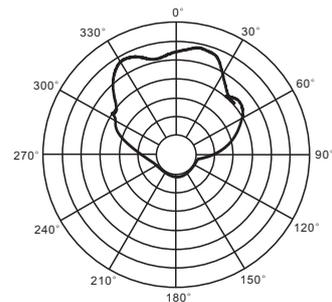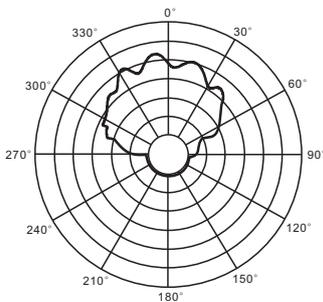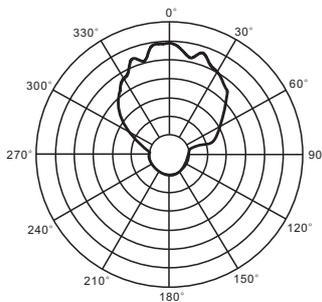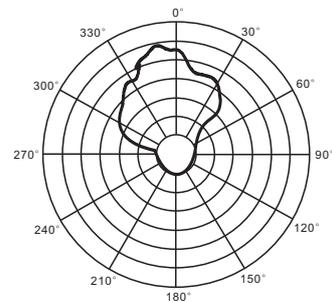
VERTICAL DIRECTIVITY

The data of S1200Na vertical directivity were collected by testing the speaker system in a big anechoic chamber.
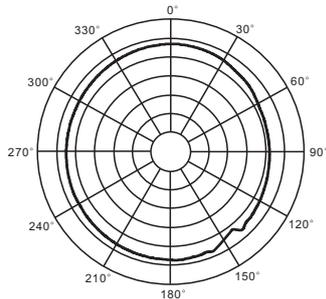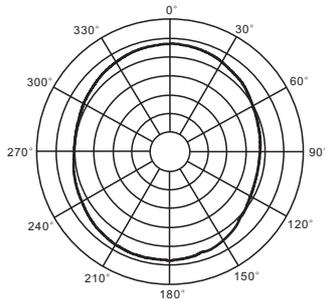
100Hz	160Hz	200Hz
400Hz	630Hz	1.0kHz
1.6kHz	2.5kHz	3.15kHz
6.3kHz	10kHz	16kHz
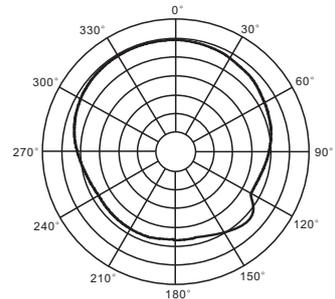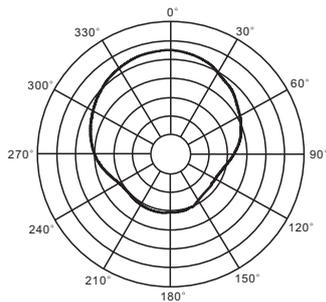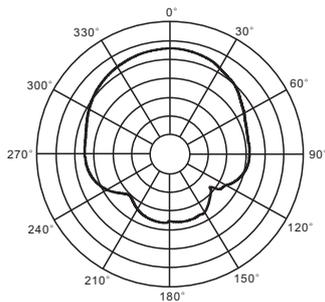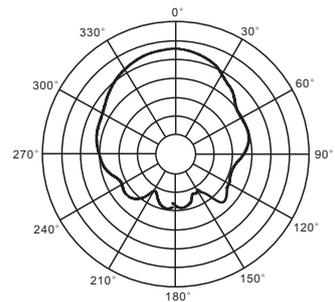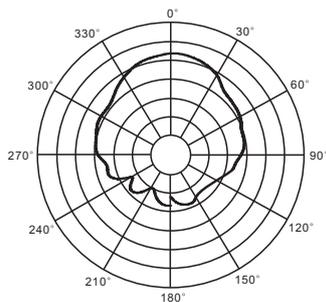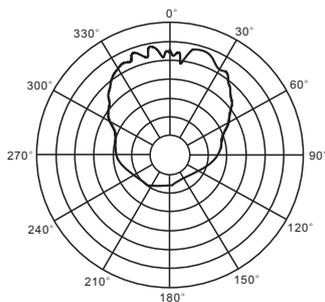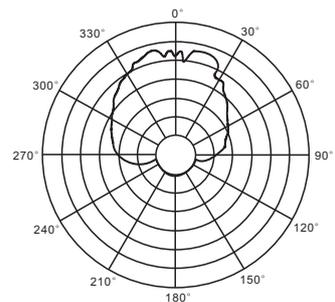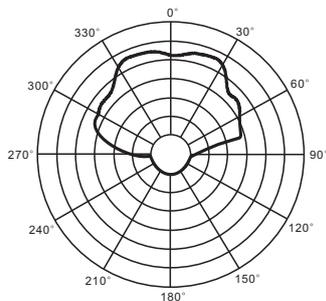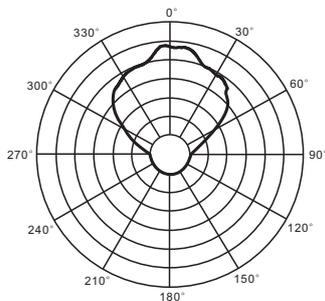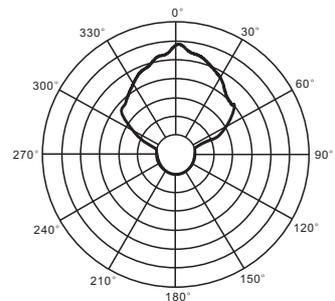
The scale is stepped by 6dB increment.

S1200Na

AMPLIFICATION MODULE

S1200Na
POWER:300W+300W

ACTIVE 3 WAY FULL RANGE ELECTRONIC COMPENSATION SPEAKER

LINE INPUT   LINE OUTPUT   PEAK   VOLUME

RS-485 INPUT   RS-485 OUTPUT   USB   RS-232

[β]® 3

Beta Three

This series of products are authorized to be produced by Elder Audio Manufactory with Germany computer aided design software and testing system according to IEC standard.

WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

No:

Elder Audio Manufacture Co., Ltd

ON   OFF

230V~ T6.3AL,50Hz/60Hz

1	Line output	4	RS-485 input	7	USB Port	10	Fuse
2	Line input	5	Signal indicator	8	RS-232 Port	11	Power supply input
3	RS-485 output	6	Voltage switch	9	Power supply switch		

SOFTWARE APPLICATION GUIDE

How to get the software

The software is stored in the CD with equipment packaging. The latest version also may be downloaded from the company website.

Software installation

System requirement: Microsoft Windows 98/XP or above version. Display resolution should be 1024*768 or above. The computer must have a RS-232 port or USB port. Run the "setup.exe" file, according computer's setup guide to install the control software.

Equipment connection

Connect the equipment to computer by RS-232, if the computer has not the RS-232 interface, you may use USB port (after connection, the computer will indicate that new device is found, then you may install the USB driver located in "driver" directory of the CD.

Software operation guide

1. Run the software(Active Speaker Controller) from program menu in the windows start button, the following interface will be shown, See Figure 1:
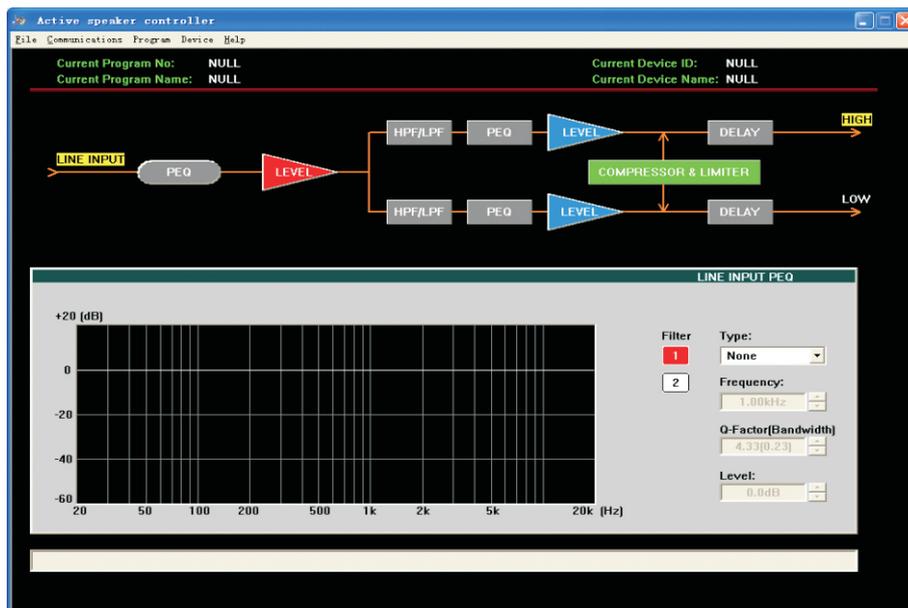
Picture   1

This interface includes all function modules about the equipment, menu description as following:

1.1> File: **Open** the configuration files, or **Save** current configuration as a file into computer;

1.2> Communications: Connect ("**Enable Communications**") or Disconnect ("**Disable Communications**") the equipment, Operation details refer to following description.

SOFTWARE APPLICATION GUIDE

1.3> Program: Obtain the information of currently used configuration file (Disconnection status),or the information of current program in the equipment(Connection status).

On disconnection status, only "**Display Current Program No**", "**Display Current Program Name**" , "**Edit Current Program Name**" and "**Load Factory Default Configuration**" may be valid. All changes do not affect the equipment internal program settings.

On connection status, all items are valid under the "Program" menu. If selecting the" **Edit Current Program Name**" command, the current program name auto saved in the equipment;

If selecting the "**Load Factory Default Configuration** " command, the current program is overwrite by the default setting automatically (**! Attention Please: this operation will overwrite the current program configuration, before executing this operation, please make sure you really ready to load factory default settings**). Details of other function items (such as"**List Program & Recall**" and "**Save as current program in device**")under the "Program" menu, please refer to following description.

1.4> Device: Modify the device information, and saved in the equipment automatically, only valid on connection status;

1.5> Help: the control software version information.

2.Connecting the device.

2.1> Three hardware connection solution(USB,RS-232,RS-485) are available for your connecting;

2.2> After connected the device with computer port by connector, Click the "Communications", select "E nable Communications" command to start the connecting. See Figure 2:
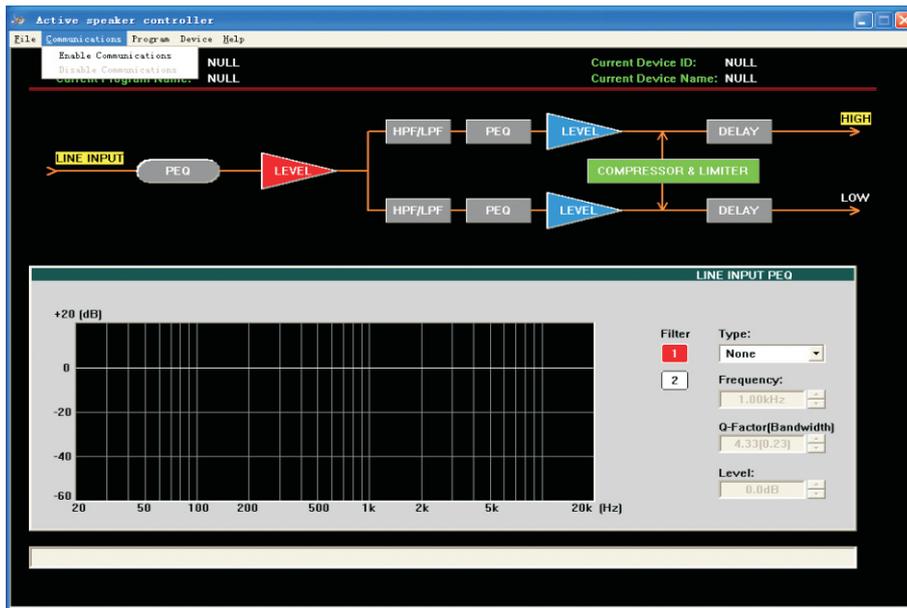
Picture 2

The software will search the connected (hardware connection) device automatically, "Search Device…" will be shown at the bottom of interface's status bar, see Figure 3:

SOFTWARE APPLICATION GUIDE
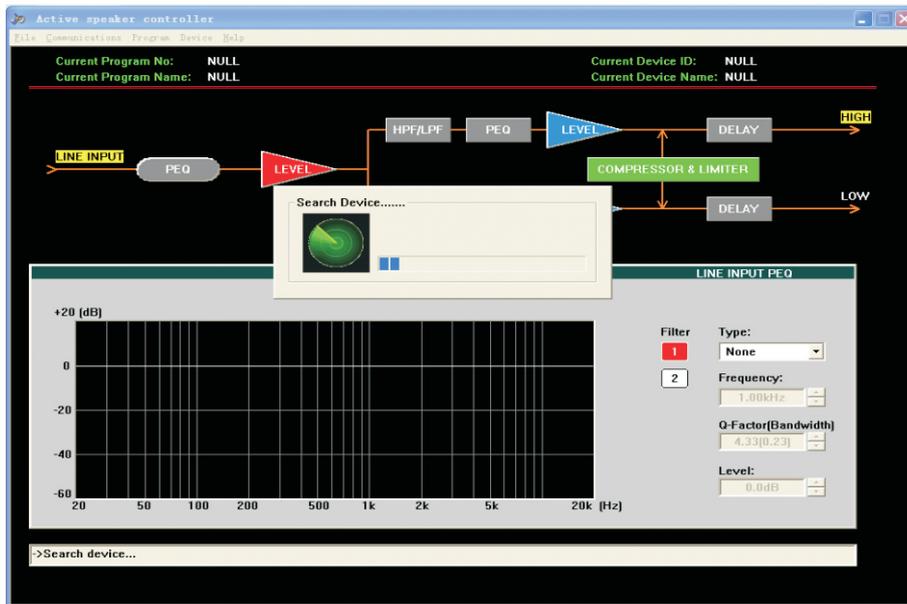
Picture　3

If found device, shown as Figure 4:
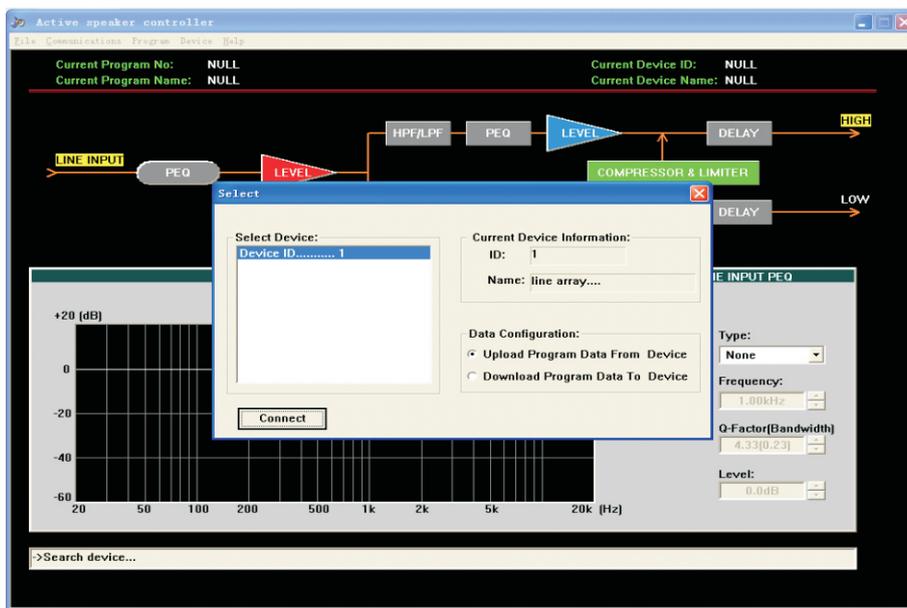
Picture　4

Devices online are listed at left, the right part shows the information of the device chosen by user.
If user want to use the config file that opens from computer,"Download Program Data to Device"
must be chosen(the operation execute transmitting the parameters into Device's RAM, if no further
save into device operation, the parameters will be lost after the device power off). If user chose
"Upload Program Data From Device", it will load the current program that stored in device to PC.
Select the left device that you will want to connect, click the "Connect" button to start connecting.
(! Attention please: If connect with several devices, each device must a ID number which is exclusive
in the system)

SOFTWARE APPLICATION GUIDE

After connecting successfully, the software will update the display automatically, and show the information of currently connected device, and current program used by device, see Figure 5:
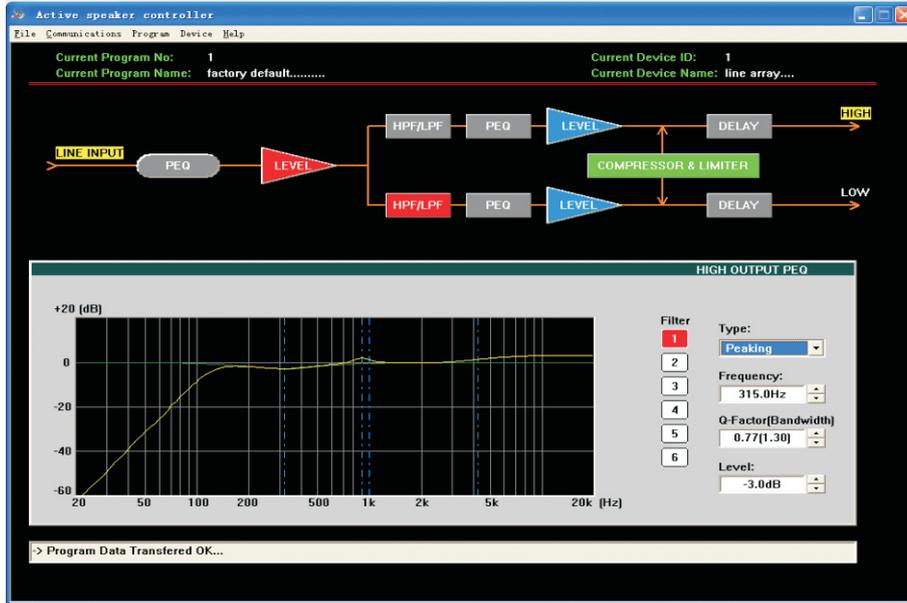
Picture 5

On above interface, click corresponding function button, and executing those operation that you want.

3. Recall or Save the configuration file.

When the device used in different places, the different configuration file are necessary. Two ways are available for user to recall or save the configuration file.

3.1> Save as a file, When user finish the adjustment, the parameters may be saved as a file into PC through "Save As" in the file menu, see Figure 6:
When you ready to load the config file for later using on other device, you may open the file under the "File" menu.
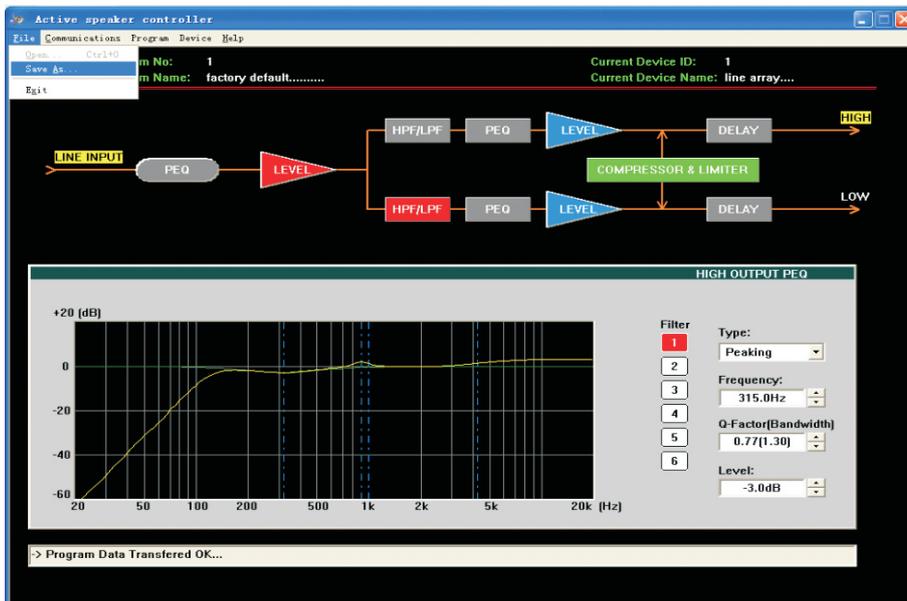
Picture 6

SOFTWARE APPLICATION GUIDE

3.2>User also may save the parameters in the device, total max six programs may be saved through "Save as current program in device" under "program" menu. See Figure 7:
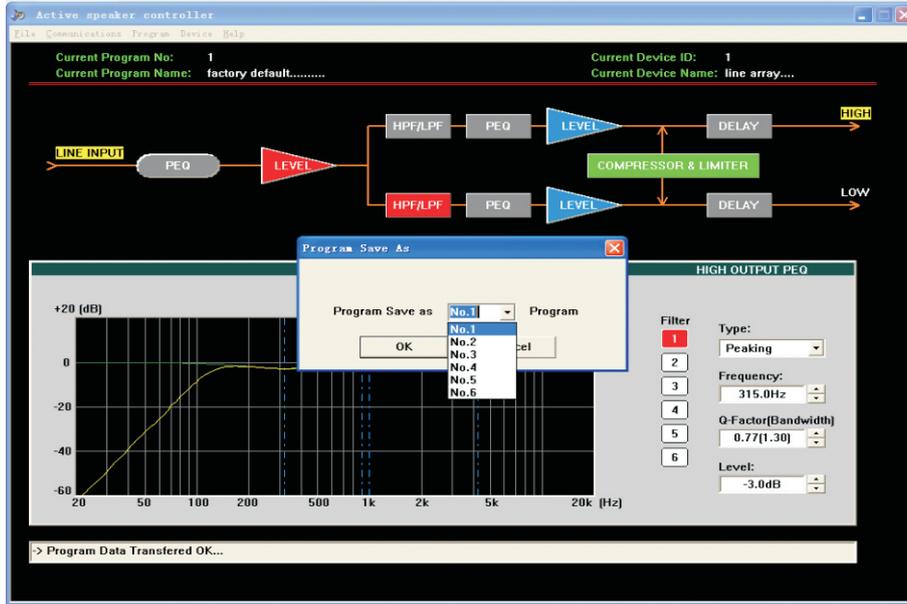
Picture   7

According to the different file source, the two ways are available for recall the existing configuration file. For the file saved in the computer, it may be recalled from "Open" under "File" menu. Then connect the equipment, choose "Download program data to device" in pop-out dialog box, see Figure 4.

3.3> For the files(or programs) in the device, it may be recalled through "List Program&Recall" in Program menu. See Figure 8
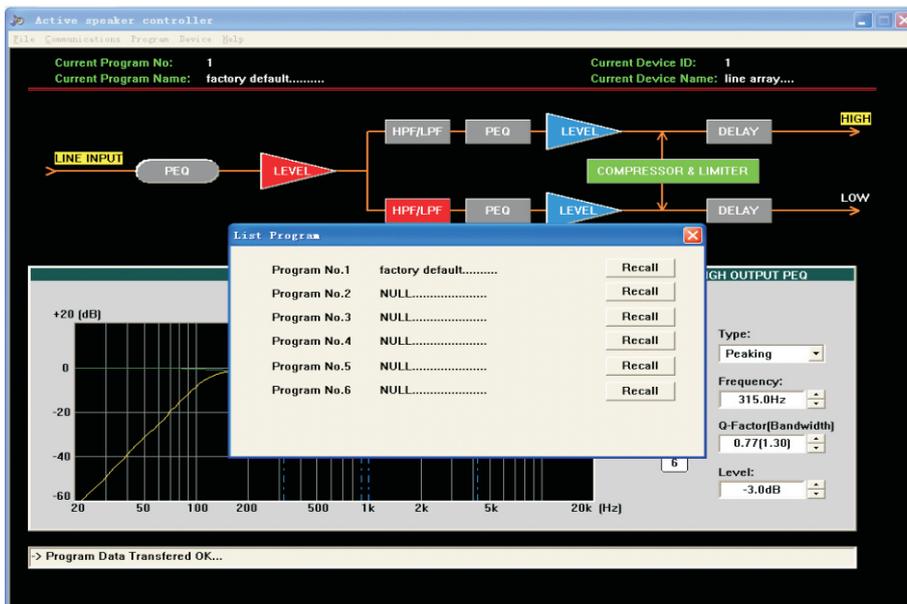
Picture   8

Select the program you want to use in the pop-out dialog box, then click "Recall" button, the software will update the display automatically, and the device using the program that has been recalled.

SOFTWARE APPLICATION GUIDE

4. Change the information of the device that is online.

Device information means the identifier of device, such as the description of device position etc, Include ID and device name. After connecting, it may be changed through clicking"Edit current device information" in device menu, See Figure 9:

! Attention: ID number is only available for number 1~10, that's to say only max 10 device may be connected one RS-485 Net. The max length of name is 14ASCII characters.
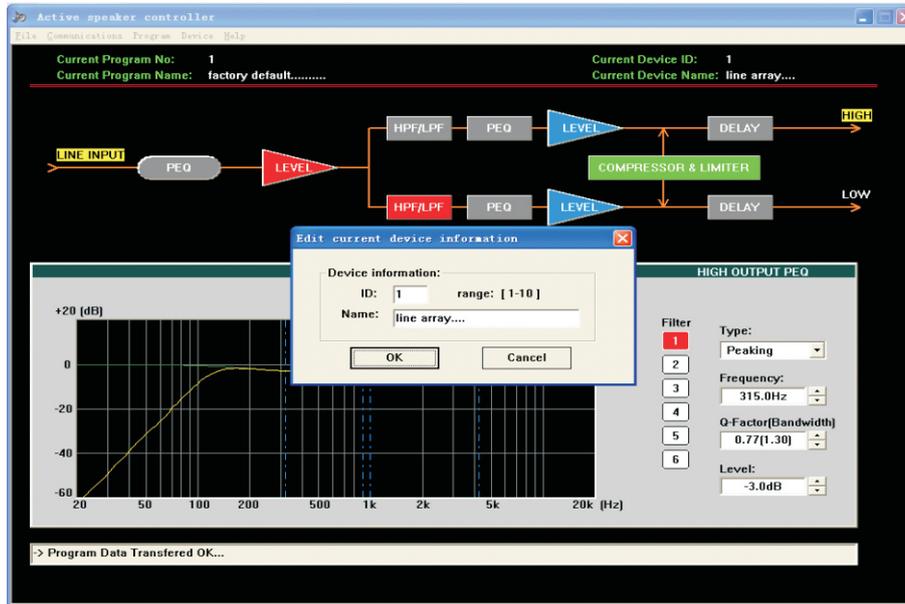
Picture   9

5. Change the current program name.

Click "Program" menu, choose "Edit current program name" to change the program name, See Figure 10:
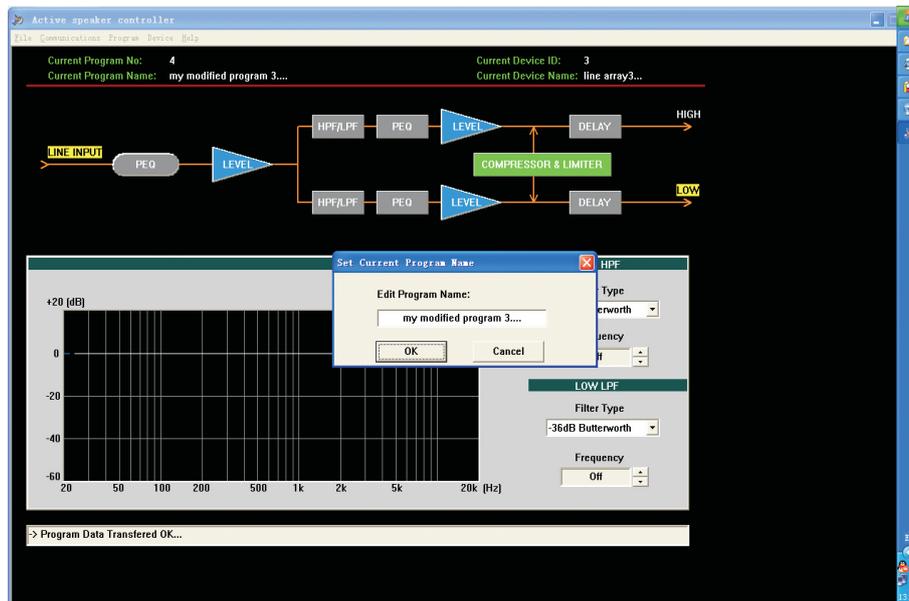
Picture   10

SOFTWARE APPLICATION GUIDE

6. Disconnection.

After finishing the adjustment of parameters, the current parameters may be saved into the device for the next power on operation. If user does not save the program into device, all the changes based on previous parameters will not be saved. Choose "Disable communications" under "communications" menu to disconnection. Please see the figure 11:
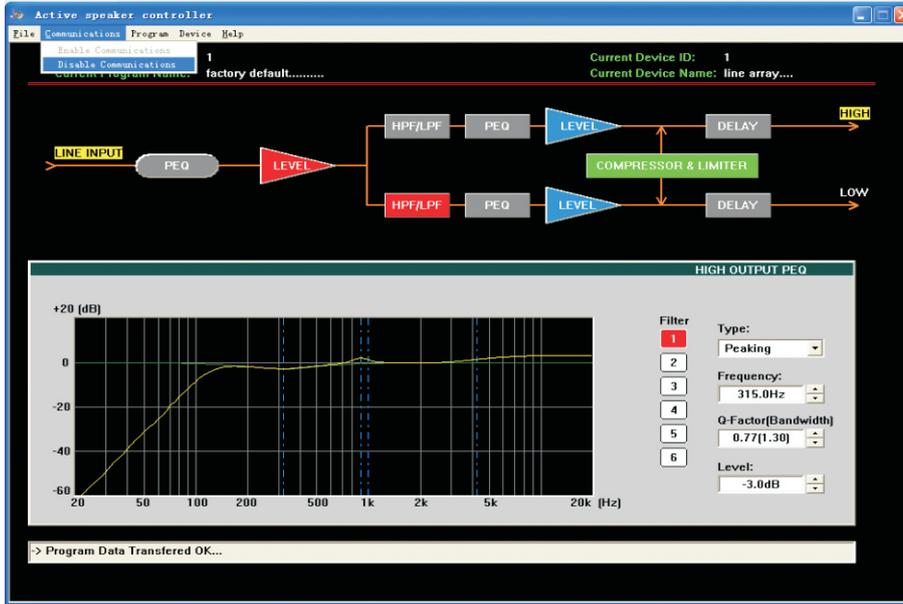
Picture   11

APPLICATION EXAMPLES

1.Save current program as another program with new name.

If user want to save as another program with new name, user should select "program save as" command first, then select "edit current program name" command.

Please see details as below example.

1）After uploading the Program No.1 from the device to the PC, then modify those parameters that you want, then select the "Save As Current Program In Device" command in "Program" Menu:

13
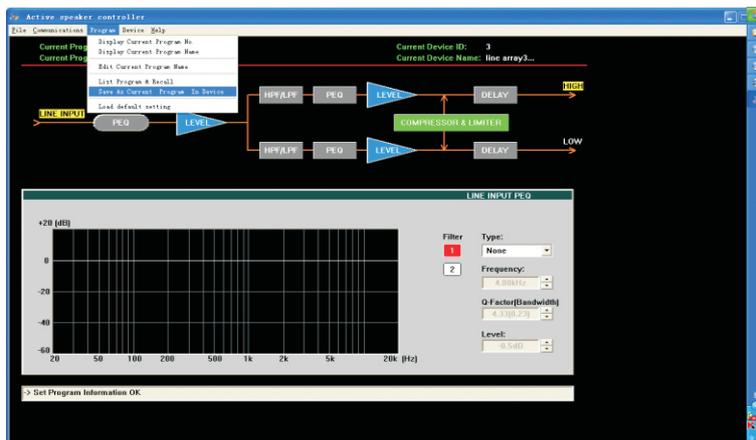
APPLICATION EXAMPLES

2) Then select the Program Number that will be saved into device:
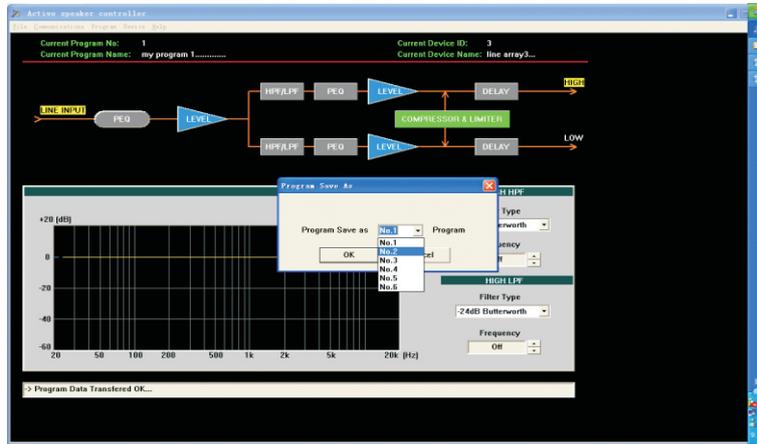
Then click "OK" button, the Program No.1 has been saved as Program No.2,and the current program auto changed to No.2(and the Program No.1 just be uploaded to PC has not been changed)

3) Then select "Edit Current Program Name" command in "Program" menu:
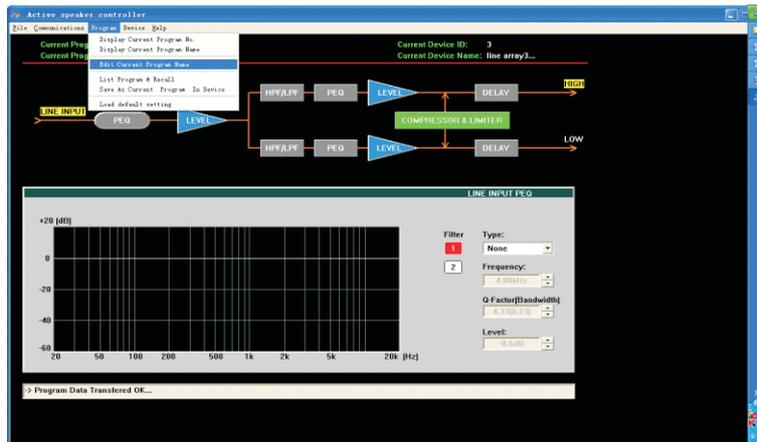
4) Then on the "Set Current Program Name " interface, edit the program name as you want:

S1200Na
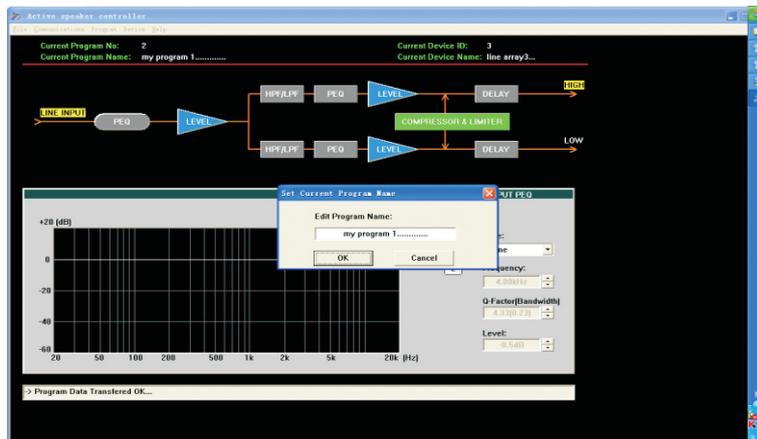
APPLICATION EXAMPLES

Changed to "my concert hall" as the bellow figure
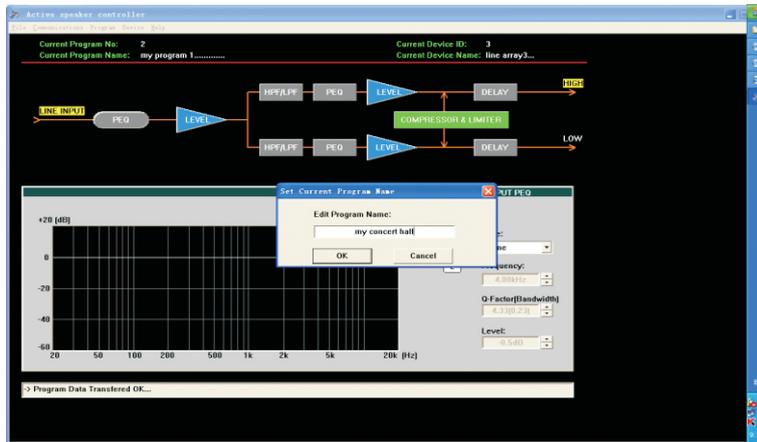
5) Click "OK" button, thus the "Current Program Name:" on the main interface has been changed to "my concert hall".
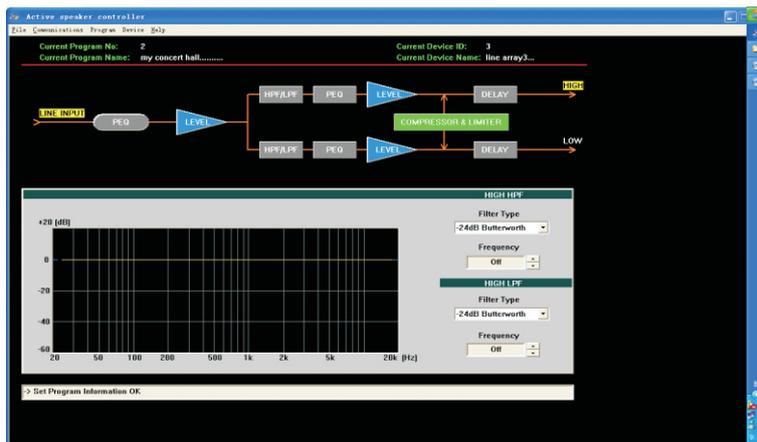
6) Select " List Program & Recall" command in "Program" menu, the result in the program list of the device now as bellow figure:

S1200Na

APPLICATION EXAMPLES

2.Save the program which is uploading from device as a file in computer.

Operation for file is only effected on disconnection status. If on connection status, "Edit current program name" is immeditaly valid(auto save into the device). If want to use the config file for later use with another device, You may modify the "program name" on disconnection status.and save as another file. Then download the new config file into device, then "save as" another program or current program into device.

Operation Example Steps:

1) After upload the Program No.3 from the device to the PC, then modify some parameters that user want to do, if adjust OK, then select "Disable Communications" command in "Communications" menu.(on disconnection, those modification does not effect to program in device)

2) If want to change the name, select "Edit Current Program Name" in "Program" menu:

APPLICATION EXAMPLES

Edit Program Name to "my modified program 3", then click "OK" button.

3) Then select "Save As" command in "File" menu.
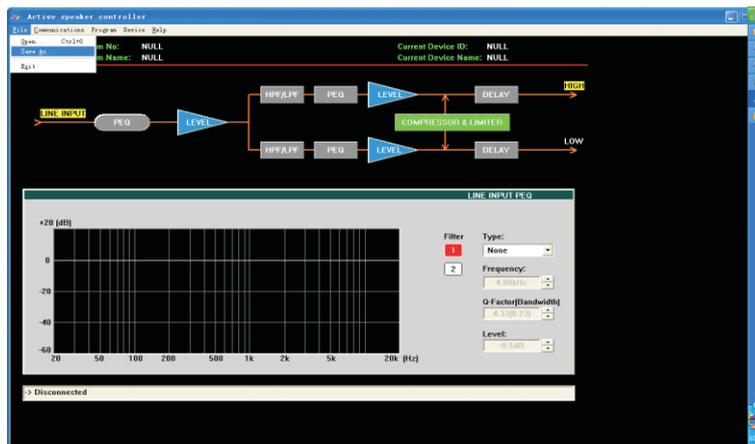
4) In the "File Name(N)" frame, input "next hall.asc",then click "Save(S)" button.
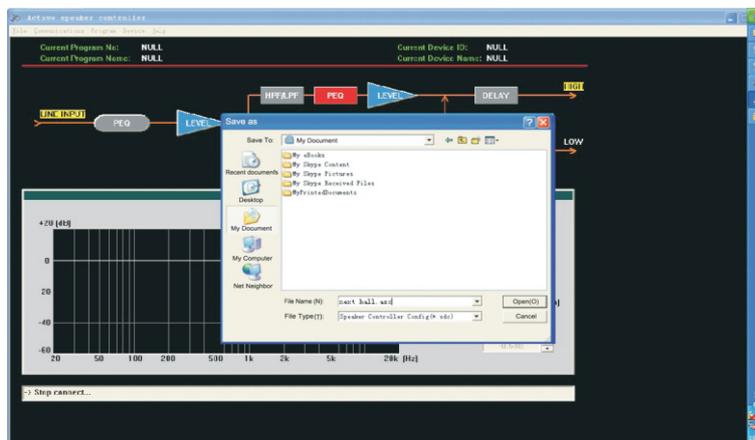
APPLICATION EXAMPLES

3.Downloading a file into device, and save as program in device.

1) After downloading the config file into DEVICE(only to RAM, before select "Save As Current Program In Device" command, the parameters have not saved into FLASH ROM!)
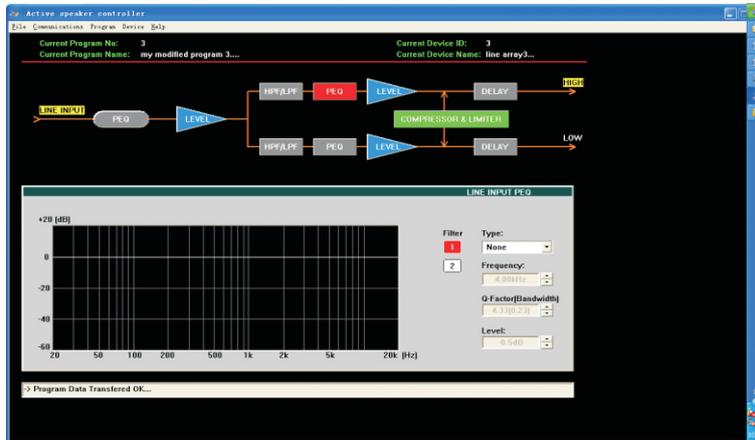
2) Select "Save As Current Program In Device" command in "Program" menu:
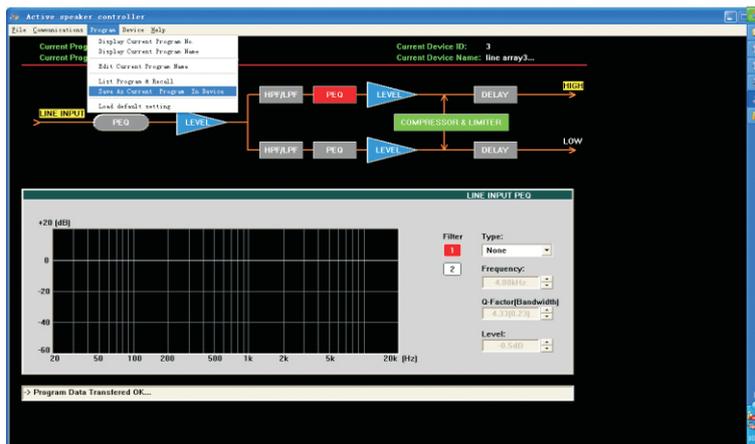
3) Then select the No(for example No.4) that you want to save in,
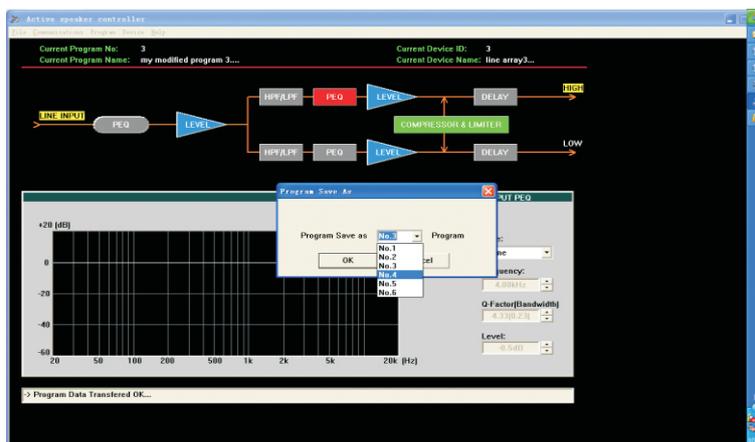
APPLICATION EXAMPLES

Click "OK" button ,then the parameters of config file(next_hall.asc) have been saved as program No.4 in device. The "Current Program No" and the "Current Program Name" are corresponding to File, as bellow figure:
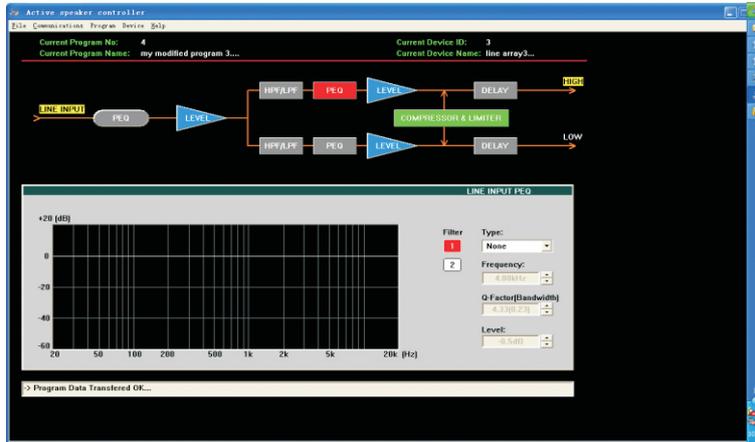
List as below
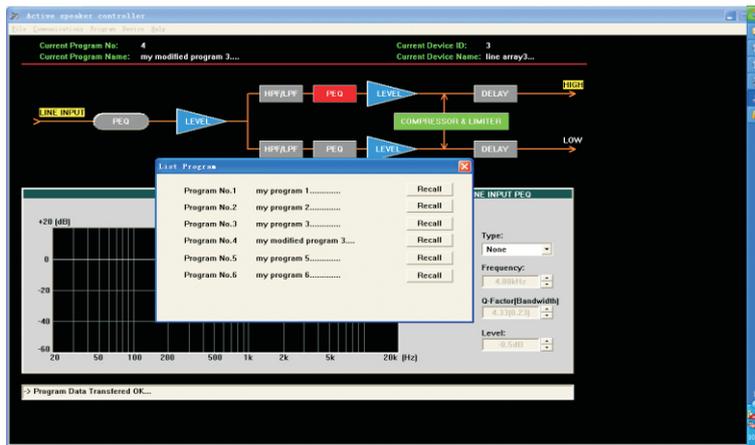
INSTALLATION

DIMENSIONS

235mm
280mm

Top view

416mm
721mm

Front view

423mm
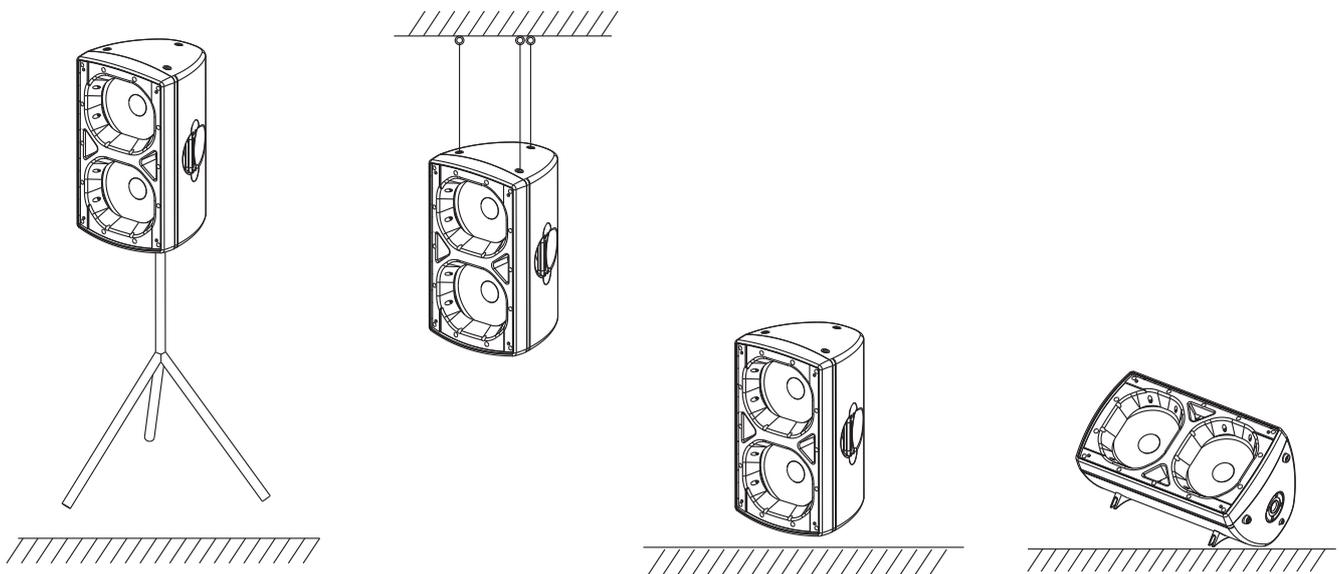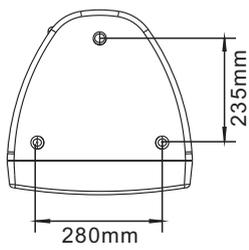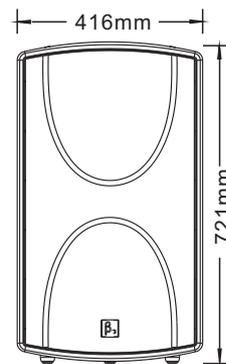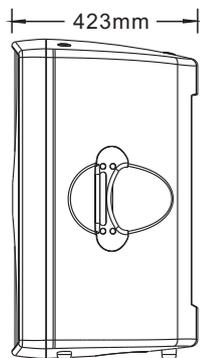
Side view

Back view

20
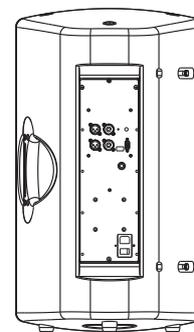
S1200Na

SAFETY INSTRUCTIONS

DO NOT OPEN THE COVER：
Do not open the cover to avoid the risk of electric shock caused by high voltage parts in the product. Any problems caused by user's wrong actions are out of warranty.
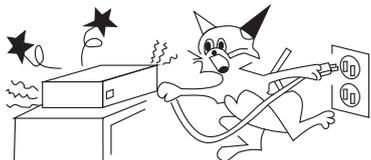
DO NOT DAMAGE THE POWER CORD：
Please hold the plug when pull out or plug in the cord. Do not pull out or touch the cord with wet hand, or it will cause the risk of electric shock. Power supply cords should be routed so they are not likely to be walked upon or pinched by items placed on or again st them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not By pulling on the cord.
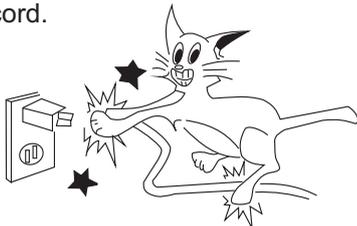
AVOID OBJECT AND LIQUID ENTRY：
Take care that objects do not fall into and that liquids are not spilled into the inside of the product.If the object or liquid enter the product,please ask qualified personnel to check it.

ABNORMAL STATUS：
In the event of abnormal noise and smell, please put off the power supply and pull out the cord, please ask qualified personnel to check it.

NONUSE FOR A LONG TIME：
When nonuse it for a long time, please put off the power supply and pull out the cord to avoid the unexpected dangers.
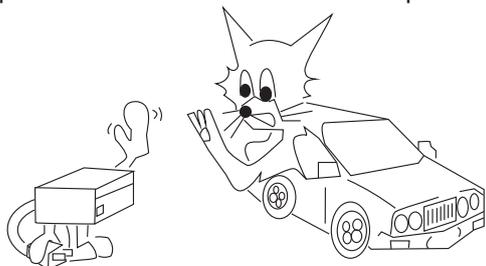
LIMITED WARRANTY

If malfunction occurs during the specified warranty period from the date of original purchase, the product will be repaired or replaced without charge by Elder Audio.

The Limited Warranty does not apply to:
(a) exterior finish or appearance;
(b) certain specific items described in the individual product data sheet or owner's manual;
(c) malfunction resulting from use or operation of the product other than as specified in the individual product data sheet or owner's manual;
(d) malfunction resulting from misuse or abuse of the product;
(e) malfunction occurring at any time after repairs have been made to the product by anyone other than Elder Audio Service or any of its authorized service representatives.

To obtain warranty service, a customer must deliver proof of purchase of the product in the form of a bill of sale or receipt invoice.

S1200Na Speakers are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. The Limited Warranty does not apply to burned voice coils or malfunctions such as cone and/or coil damage resulting from improperly designed enclosures. Additional details are included in the Limited Warranty statement.

S1200Na Accessories are guaranteed against malfunction due to defects in materials or workmanship for a period of one (1) year from the date of original purchase. Additional details are included in the Limited Warranty statement.

S1200Na Flying Hardware (including enclosure-mounted hardware and rigging accessories) is guaranteed against malfunction due to defects in materials or workmanship for a period of one (1) year from the date of original purchase. Additional details are included in the Limited Warranty statement.

Specifications subject to change without notice.

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Beta Three

S1200Na