Manual

Octo

DIGITAL PROCESSOR

Owner's Manual

IMPORTANT SAFETY INFORMATION

WARNING FOR YOUR PROTECTION READ THE FOLLOWING:

KEEP THESE INSTRUCTIONS

HEED ALL WARNINGS

FOLLOW ALL INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing liquid and no object filled with liquid, such as vases, shall be placed on the apparatus.

CLEAN ONLY WITH A DRY CLOTH.

DO NOT BLOCK ANY OF THE VENTILATION OPENINGS. INSTALL IN ACCOR DANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.

ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Use only with the cart stand, tripod bracket, or table specified by the manufacture, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

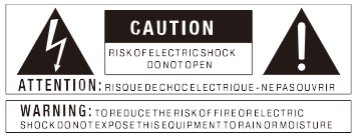
POWER ON/OFF SWITCH: If the equipment has a Power switch, the Power switch used in this piece of equipment DOES NOT break the connection from the mains.

MAINS DISCONNECT: The plug shall remain readily operable. For rack-mount or installation where plug is not accessible, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated into the electrical installation of the rack or building.

FOR UNITS EQUIPPED WITH EXTERNALLY ACCESSIBLE FUSE RECEPTACLE: Replace fuse with same type and rating only.

MULTIPLE-INPUT VOLTAGE: This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. Connect this equipment only to the power source indicated on the equipment rear panel. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel or equivalent.

If connected to 240V supply, a suitable CSA/UL certified power cord shall be used for this supply.



The symbols shown above are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash with arrowpoint in an equilateral triangle means that there are dangerous voltages present within the unit. The exclamation point in an equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no user serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the unit during storms to prevent damage.

IMPORTANT SAFETY INFORMATION

SAFETY INSTRUCTIONS

NOTICE FOR CUSTOMERS IF YOUR UNIT IS EQUIPPED WITH A POWER CORD.

WARNING: THIS APPLIANCE SHALL BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION.

The cores in the mains lead are coloured in accordance with the following code:

GREEN and YELLOW - Earth BLUE - Neutral BROWN - Live

As colours of the cores in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The core which is coloured green and yellow must be connected to the terminal in the plug marked with the letter E, or with the earth symbol, or coloured green, or green and yellow.
- The core which is coloured blue must be connected to the terminal marked N or coloured black.
- The core which is coloured brown must be connected to the terminal marked L or coloured red.

This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. If the attachment plug needs to be changed, refer servicing to qualified service personnel who should refer to the table below. The green/yellow wire shall be connected directly to the units chassis.

CONDUCTOR		WIRE COLOR	
		Normal	Alt
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E	EARTH GND	GREEN/ YEL	GREEN

WARNING

This device is equipped with high voltage elements. Do not open the shell if not necessary. Pay attention to the risk of electric shock when checking or modifying the device.
The responsibility of decline of quality or burn down of the device caused by owner's modifying or disoperation is not included in the warranty.
If the ground is defeated, certain fault conditions in the unit or in the system to which it is connected can result in full line voltage between chassis and earth ground. Severe injury or death can then result if the chassis and earth ground are touched simultane-ously.

Table of Contents

Section 1-Introduction

1.1 Brief Introduction

Congratulations on your purchase of the K-5200. The K-5200 is the newest digital processor which developed independently, quipped with a touchable screen, 32 bit DSP, 4 ways MIC inp ut, 8 channels output, independently adjusted reverb,etc. With 1 U size and WIFI or USB conn ecting to PC, K-5200 can be conveniently used in daily life such as in KTV rooms, cafeterias, pubs, family entertainments and so on, besides, it is easily installed in standard device cabine ts. Thank you for your trust and choosing on K-5200, hope you enjoy on using the device.

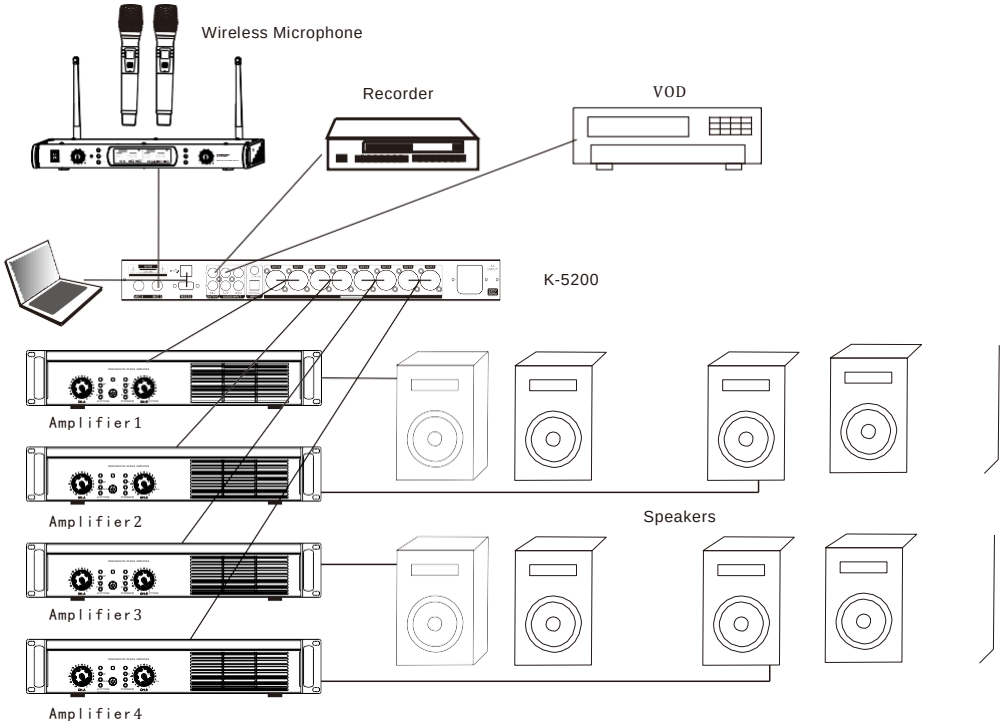
1.2 Product Feature

- Equipped with 2.4 inches and pixel of 240*400 colorful touchable screen.
- 4 ways MIC inputs, each way can be independently set 12 bands parameter EQ, with high-pass filtering and low-pass filtering.
- MIC input with dynamic compression, excitation function, feedback inhibition, noise gate.
- Music input can be set 12 bands parameter EQ with high-pass filtering, low-pass filtering, dynamic compression and excitation function.
- Echo and reverb can be independently set with 5 bands parameter EQ, high-pass filtering, low-pass filtering.
- 8 ways independent output, each way can be independently set 9 bands parameter EQ, with high-pass filtering, low-pass filtering, compressor, delay and Reverse Phase function.
- Function of singing and dancing can be switched by automatic or manual.
- Connect with PC by RS232 port or USB port for quick and convenient on-line.
- With user-defined screen saver password can effectively prevented unauthorized change the setting parameters.
- 32 Bit high-performance DSP.
- 10 moderating effects can be stored.
- With remote control function, with optical fiber, coaxial input port.
- Suitable for stage performance, home theatre, KTV rooms, conference rooms and etc.

Section 2-Quick start

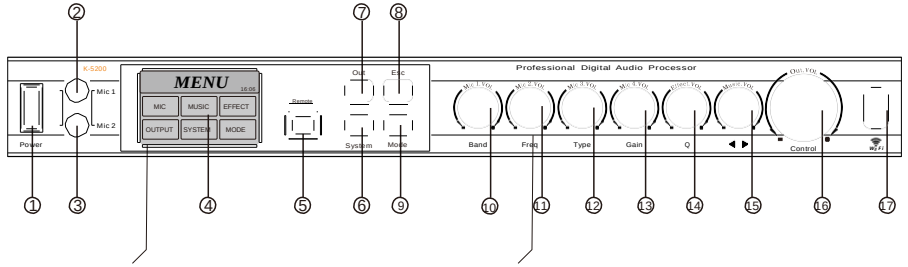
2.1 Connection Diagram

1. Please follow the proceeding steps to set up and running quickly. Please ensure the power to all the devices are turned off before proceeding.



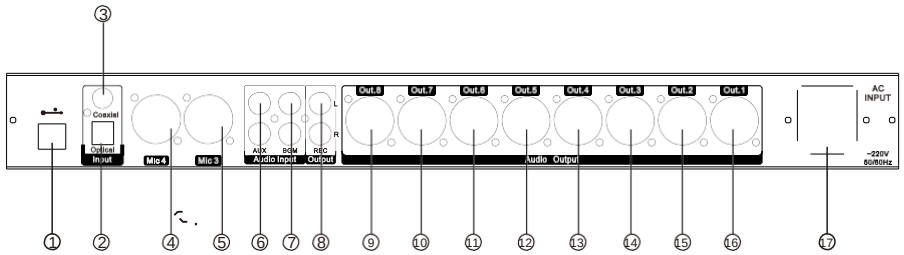
2. Apply the power to the K-5200 digital processor, and then the power to the amplifiers.
3. Turn all gain controls on your amplifiers all the way down and apply power to your amplifiers.
4. While passing the audio to the K-5200, slowly increase the amplifiers gains to the desired listening level while ensuring the amplifiers do not clip.

2.2 Front Panel



1.POWER
Power switch
2.MIC1
Microphone input
3.MIC2
Microphone input
4.Resistive touch screen
Operate the system on it
5.REMOTE
Remote receiver
6.SYSTEM
Enter the SYSTEM Setting
7.OUT
Enter the output Setting
8.ESC
Return button, return to the main interface
9. MODE
Enter the MODE Setting
10.BAND/MIC1 VOL/A
Combinational function knob for setting BAND/MIC/MIC 1 volume/Parameter A
11.FREQ / MIC 2 VOL / B
Combinational function knob for setting frequency/ MUSIC/MIC 2 volume/Parameter B
12. TYPE / EFFECT / MIC 3 VOL / C
Combinational function knob for setting MODE/ EFFECT/MIC 3 volume/Parameter C
13. GAIN / OUT / MIC 4 VOL / D
Combinational function knob for setting GAIN/ output/MIC 4 volume//Parameter D
14. Q / EFFECT.VOL / E
Combinational function knob for setting Q/Effect volume/Parameter E
15. MUSIC.VOL / F
Combinational function knob for setting Music volume/Parameter F
16. CONTROL / OUT.VOL
Combinational function knob for setting Output volume
17.WIFI
USB port for WIFI module plugging in

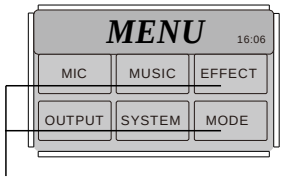
2.3 Rear Panel



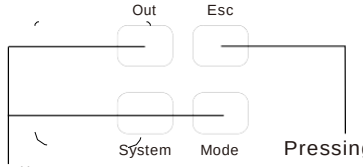
1.USB Port
For PC connection
2.OPTICAL
Select the optical input as the source
3.COAXIAL
Select the coaxial input as the source
4.MIC 4
Microphone input
5.MIC 3
Microphone input
6. AUX Inputs
Select the AUX inputs as the source
7.BGM Inputs
Select the BGM inputs as the source
8.REC Outputs
For connecting to an external audio recorder
9.OUT. 8
Connect the output to amplifier or powered speakers
10.OUT. 7
Connect the output to amplifier or powered speakers
11. OUT. 6
Connect the output to amplifier or powered speakers
12.OUT. 5
Connect the output to amplifier or powered speakers
13.OUT. 4
Connect the output to amplifier or powered speakers
14.OUT. 3
Connect the output to amplifier or powered speakers
15.OUT. 2
Connect the output to amplifier or powered speakers
16.OUT. 1
Connect the output to amplifier or powered speakers
17AC INPUT
Connect the device to this jack trhough the supplied power supply supply

2.4 Display & Control

1. The touch screen on K-5200 allows users to access different menus and edit various paramete rs. There are 6 menus can be accessed on main interface as below, including MIC, MUSIC, EFFE CT, OUTPUT, SYSTEM, MODE. Users can get into the menu by clicking on the screen, pressing the menu button, combinational function knobs and CONTROL knobs.Besides,users can get into the EQ edit page of each menu.

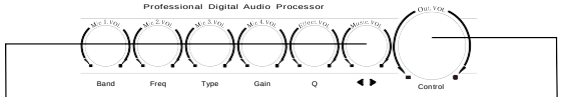


Clicking to access



Menu button
Pressing to access

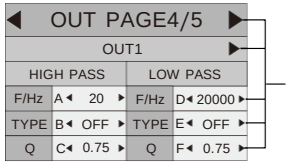
Pressing back to main interface



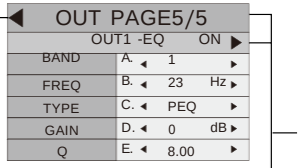
Combinational function knobs
1.Pressing to access the menu;
2.Long pressing to get into the EQ edit page of each menu.

CONTROL knob
Rotating and pressing to access

2.Users can edit the parameters by clicking ◄ on the screen or rotating the specific knobs after getting into the menu. Pressing the ESC button to get back to main interface.

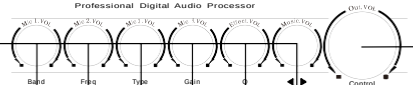


Clicking to edit



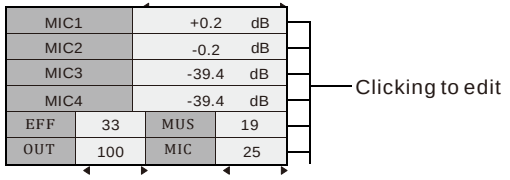
1. Rotating to turn page.
2.On some page with channe ls chosen, pressing the knobs to turn to channel selection fu nction, then rotating to select channel.
3.Pressing the knobs again and get back to page turning function.

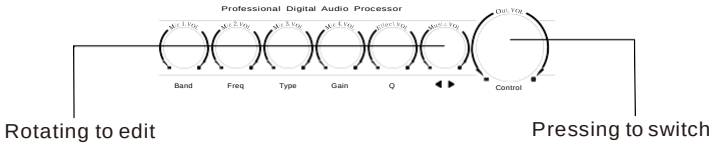
Rotating to edit



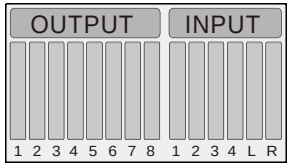
Parameter A., B., C., D., E., F: ①. Parameter F
②. Switch for some function

3.On main interface, Pressing the ESC button or rotating any of the combinational function knobs will get into the VOLUME page as below, which including the volume adjustment of MIC1~4, EFF ECT, MUSIC, OUTPUT and all MIC. Users can edit the volume by clicking ◄ on the screen or rotating the specific knobs. The OUTPUT and all MIC volume adjustment can be switched by pressing CONTROL knob and edited by rotating.



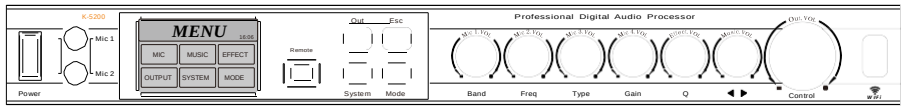


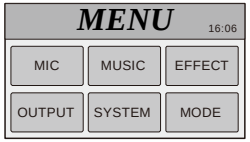
4.On the above VOLUME page, pressing ESC button to get into the SIGNAL page as below. This page shows signal from MIC 1~4 and MUSIC input, 8 OUTPUT. Pressing ESC button again to get back to main interface.



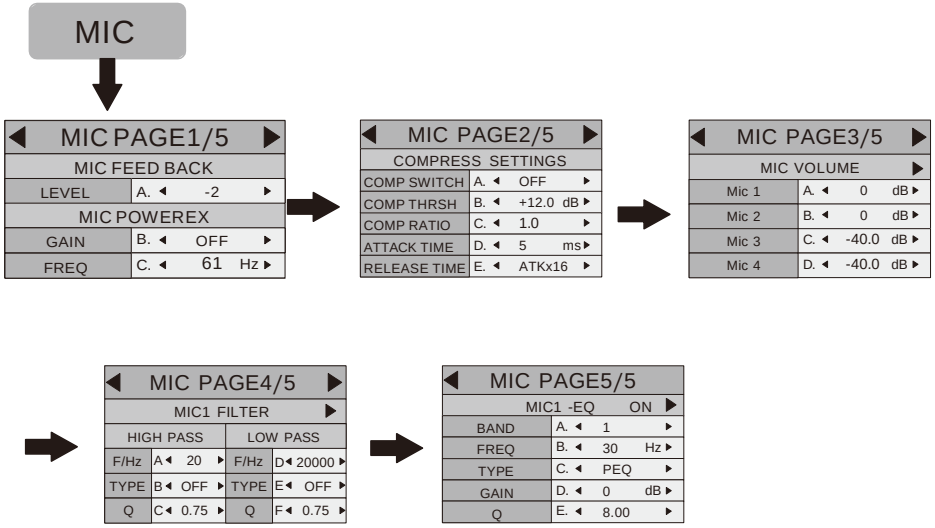
Section 3- Processing & Parameters

Users can adjust the parameters by pressing the resistive touch screen or the knobs.





3.1 MIC Setting



PAGE 1/5

MIC FEED BACK

6 degrees feedback inhibition, range:-3~+3; OFF; -3~-1 are negative inhibition, +1~+3 are active inhibition, each degree contains 0.2Hz.

MIC POWEREX

Power Excitation Function of Microphone

GAIN: Power excitation range 0~20; 0 means OFF, users can adjust 1~20 degree, the more degree it is set, the more obvious effect of excitation users feel.

FREQ: Frequency range: 60Hz~240Hz

PAGE 2/5 COMPRESS SETTINGS

COMP SWITCH

ON/OFF, it is used to switch on/off the function of compressing the dynamic range and tighten uneven parts of audio signals.

COMP THRSH

Range:-25~+25, it is used to set the signal level at which the compressor starts to work. If the threshold level is set at -10dB, only signals that pass above -10dB will be compressed; signal below the level will not be compressed.

COMP RATIO

Range: 1.0~100, it is the amount the unit compresses the signal level and indicates the differe nce between the signal increase before compression and the increase at the output level. A 2:1 ratio means if the incoming signal is 2dB above threshold, the output signal after compression is 1dB above the threshold.

ATTACK TIME

Range: 0~100ms, it is used to set the time takes for the compressor to starting compressing when threshold is reached.

RELEASE TIME

Range: Starting time×2~ Starting time×32, it defines the time takes for the compressor to stop after the signal dips below threshold.

PAGE 3/5 MIC VOLUME/POL

MIC VOLUME

Range:-40~+6dB, it allows to adjust the volume of MIC 1~4;

MIC POL

0 degree (+), 180 degree (-) adjustable, it allows to adjust the phase of MIC 1~4.

PAGE 4/5 MIC1~4 FILTER

HIGH PASS

Range: 20Hz~20000Hz

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

LOW PASS

Range: 20Hz~20000Hz

Preset 8 types of Low-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

PAGE 5/5

MIC1~4-EQ

ON/OFF, it is the switch for turning on or off the EQ editor.

MIC 1~4 EQ Editor

BAND: 1~12;

FREQ Range: 20Hz~20000Hz;

TYPE: PEQ: Manipulates a set range of frequencies, out in both directions from the center frequency, with the “Q” parameter determining the width;

HS Shelf: High-pass Filtering Shelf, manipulates all frequencies above the set frequency;

LS Shelf: Low-pass Filtering Shelf, manipulates all frequencies below the set frequency;

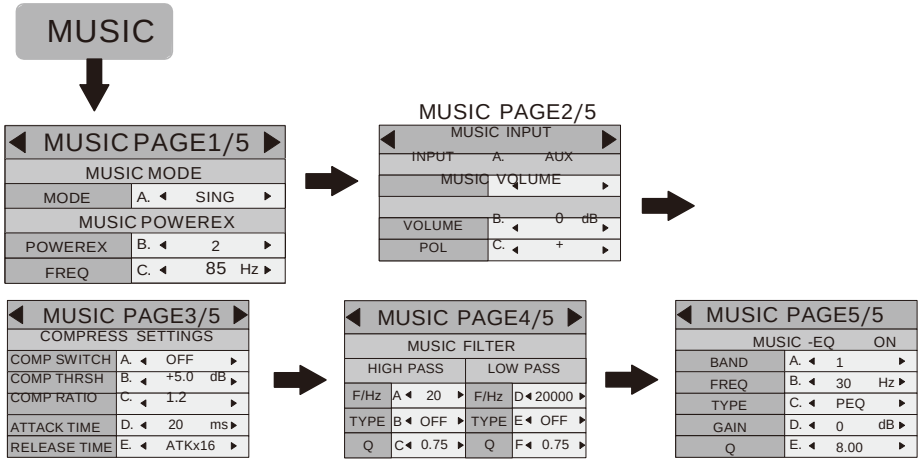
GAIN: -30~+12dB, allows adjusting the gain of the setting frequency band.

Q: 0.1~128, it is used to adjust the width of the PEQ filter, Lower values, create wider EQ curves (covering wider a wider range of frequency); higher values create narrower EQ curves (covering a much smaller range of frequencies for more surgical EQ work);

HS: High-pass Filtering, 0.1~1.3;

LS: Low-pass Filtering, 0.1~1.3;

3.2 MUSIC Setting



PAGE 1/5

MUSIC MODE

SING Mode: The subwoofer will be reduced to make it more suitable for singing.

DISCO Mode: The subwoofer will be enhanced to make it more suitable for dancing.

AUTO Mode: If there is signal input from the MIC input port, the subwoofer will be reduced auto matically; when the signal from MIC input is gone, the subwoofer will go back to the previous level .

Under this mode,users aren't allowed to adjust the parameters on PAGE 4 or 5 (can't turn to PAGE 4 or 5).

MUSIC POWEREX

Music Power Excitation Function, it can only be used under the SING or DISCO mode.

POWEREX: Power excitation range 0~20; 0 means OFF, users can adjust 1~20 degree, the more degree it is set, the more obvious effect of excitation users feel.

FREQ: Frequency range: 60Hz~240Hz

PAGE 2/5

MUSIC INPUT

4 types input for selection: AUX/BGM/COAX/OPTI, it allows to choose the audio source input;

MUSIC VOL

Range: -40~+6dB;

MUSIC POL;

0 degree (+), 180 degree (-) adjustable, allows to adjust the phase of Music.

PAGE 3/5 COMPRESS SETTINGS

COMP SWITCH

ON/OFF, it is used to compress the dynamic range and tighten uneven parts of audio signals.

COMP THRSH

Range:-25~+25, it is used to set the signal level at which the compressor starts to work. If the threshold level is set at -10dB, only signals that pass above -10dB will be compressed; signal below the level will not be compressed.

COMP RATIO

Range: 1.0~100, it is the amount the unit compresses the signal level and indicates the differe nce between the signal increase before compression and the increase at the output level. A 2:1 ratio means if the incoming signal is 2dB above threshold, the output signal after compression is 1dB above the threshold.

ATTACK TIME

Range: 0~100ms, it is used to set the time takes for the Compressor to starting compressing when threshold is reached.

RELEASE TIME

Range: Starting time×2~ Starting time×32, it defines the time takes for the Compressor to stop after the signal dips below threshold.

PAGE 4/5 MUSIC FILTER (This page can't be gotten into under the AUTO mode)

HIGH PASS

Range: 20Hz~20000Hz

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

LOW PASS

Range: 20Hz~20000Hz

Preset 8 types of Low-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

PAGE 5/5 (This page can't be gotten into under the AUTO mode)

MUSIC-EQ

ON/OFF, it is the switch to turn on or off the EQ editor.

MUSIC EQ Editor

BAND: 1~12;

FREQ Range: 20Hz~20000Hz;

TYPE: PEQ: Manipulates a set range of frequencies, out in both directions from the center frequency, with the “Q” parameter determining the width;

HS Shelf: High-pass Filtering Shelf, manipulates all frequencies above the set frequency;

LS Shelf: Low-pass Filtering Shelf, manipulates all frequencies below the set frequency;

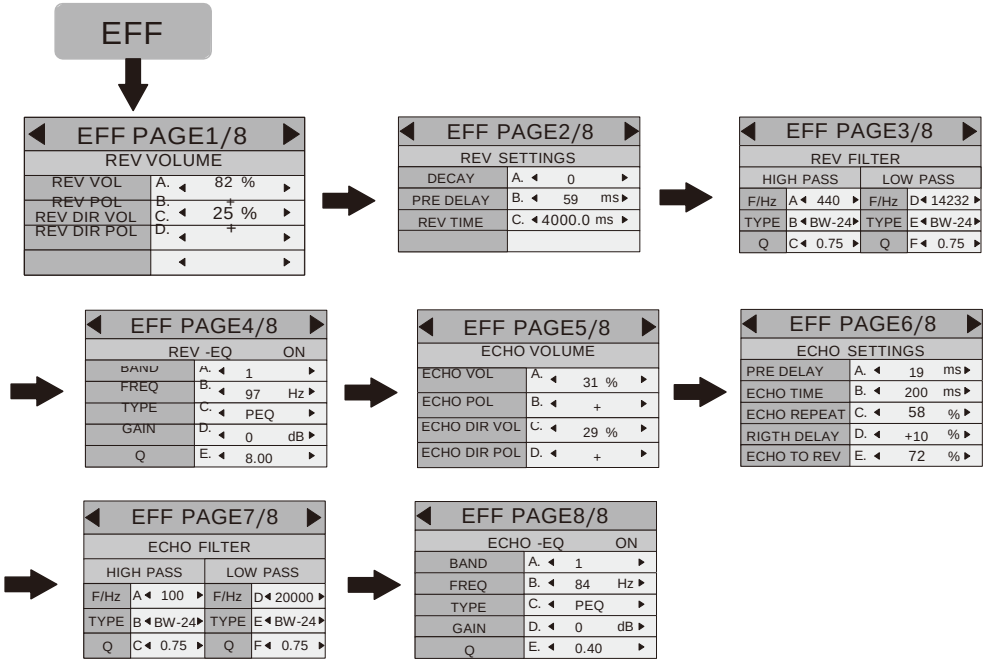
GAIN: -30~+12dB, allows adjusting the gain of the setting frequency band.

Q: 0.1~128, adjusts the width of the PEQ filter, Lower values, create wider EQ curves (covering wider a wider range of frequency); higher values create narrower EQ curves (covering a much smaller range of frequencies for more surgical EQ work);

HS: High-pass Filtering, 0.1~1.3;

LS: Low-pass Filtering, 0.1~1.3;

3.3 EFFECT Setting



REVERB is the ambient sound of various live environments such as clubs, studios, concert halls, etc. It is used for enhancing the sound of vocals to make them more realistic and interesting.

The Echo effect consists of delays which generate the artificial echoes. In an echo effect, the processed signal is mixed from the processed and unprocessed signal; it makes a singer's voice sound more attractive. Flexible adjustment of time, feedback and gain of echo leads to charming Karaoke effect.

PAGE 1/8 REV VOLUME/POL

REV VOL

Range: 0~100, the higher value the clearer effect;

REV POL

0 degree (+), 180 degree (-) adjustable, it is used to adjust the phase of Reverb;

REV DIR VOL

Range: 0~100;

REV DIR POL

0 degree (+), 180 degree (-) adjustable, it is used to adjust the phase of Reverb Direct Voice.

PAGE 2/8 REV SETTINGS

DECAY

Range: 0~90;

PRE DELAY

Range: 0~100ms, it is used to adjust the amount of delay time before the reverb effect becomes audible. Higher values can create the illusion of a much larger room as it mimics the time that it would take for reflections from very distant surfaces to reach the listeners ears.

REV TIME

Range: 312.5~5000ms, it is used to adjust the amount of time that takes for the reverb to die out. Higher values create the illusion of a larger space or harder more reflective surfaces.

PAGE 3/8 REV FILTER

HIGH PASS

It adjusts the frequency of the reverb high pass filter. Higher values create a brighter sounding reverb effect, whereas lower values yield a darker sounding reverb.

Range: 20Hz~20000Hz,

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

LOW PASS

It adjusts the frequency of the reverb low pass filter. Lower values will allow the lower frequ encies to pass through the reverb effect creating a fuller, darker reverb, whereas higher values will begin cutting off lower frequencies, which can make a reverb sound thinner and sit better in a busy mix.

Range: 20Hz~20000Hz

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

PAGE 4/8

REV-EQ

ON/OFF, it is the switch to turn on or off the EQ editor.

REVERB EQ Editor

BAND: 1~5;

FREQ Range: 20Hz~20000Hz;

TYPE: PEQ: Manipulates a set range of frequencies, out in both directions from the center frequency, with the “Q” parameter determining the width;

HS Shelf: High-pass Filtering Shelf, manipulates all frequencies above the set frequency;

LS Shelf: Low-pass Filtering Shelf, manipulates all frequencies below the set frequency;

GAIN: -30~+12dB, allows adjusting the gain of the setting frequency band.

Q: 0.1~128, adjusts the width of the PEQ filter, Lower values, create wider EQ curves (covering wider a wider range of frequency); higher values create narrower EQ curves (covering a much smaller range of frequencies for more surgical EQ work);

HS: High-pass Filtering, 0.1~1.3;

LS: Low-pass Filtering, 0.1~1.3;

PAGE 5/8 ECHO VOLUME/POL

ECHO VOL

Range: 0~100, the higher value the clearer effect;

ECHO POL

0 degree (+), 180 degree (-) adjustable, allows to adjust the phase of Echo;

ECHO DIR VOL

Range: 0~100, it is used to adjust the volume of direct sound;

ECHO DIR POL

0 degree (+), 180 degree (-) adjustable, it is used to adjust the phase of Echo Direct Voice.

PAGE 6/8 ECHO SETTINGS

ECHO PRE DELAY

Range: 0~100ms, it is used to adjust the amount of delay which occurs before you begin to hear the first - repeats. Higher values can create the illusion of a much larger room as it mimics the time that it would take for reflections from very distant surfaces to reach the listeners ears;

ECHO TIME

Range: 0~500ms, it is used to adjust the amount of delay which occurs before you begin you begin to hear any repeats;

ECHO REPEAT

Range: 0~85%, it is used to adjust the times the delay will be repeated. The higher the value of this parameter, the longer the delay effect will be heard before fading out;

RIGHT DELAY

Range: -50%~50%, referring to Left channel;

ECHO TO REV

Range: 0~100, it is used to adjust the volume from Echo to Reverb.

PAGE 7/8 ECHO FILTER

HIGH PASS

It adjusts the frequency of the echo high pass filter. Lower values (or OFF) allow more of the low frequencies to be passed through the effect and yield a fuller sounding echo, whereas higher values begin to cut off lower frequencies, creating a thinner sounding echo effect which can make the effect sit better in a busy mix.

Range: 20Hz~20000Hz;

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

LOW PASS

It adjusts the frequency of the echo low pass filter. Higher values allow more of the high frequencies to pass, creating a brighter Echo effect. Lower values will begin to cut off the higher frequencies, creating a darker sounding echo effect.

Range: 20Hz~20000Hz;

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

PAGE 8/8

ECHO-EQ

ON/OFF, it is used to turn on or off the EQ editor.

ECHO EQ Editor

BAND: 1~5;

FREQ Range: 20Hz~20000Hz;

TYPE: PEQ: Manipulates a set range of frequencies, out in both directions from the center frequency, with the “Q” parameter determining the width;

HS Shelf: High-pass Filtering Shelf, manipulates all frequencies above the set frequency;

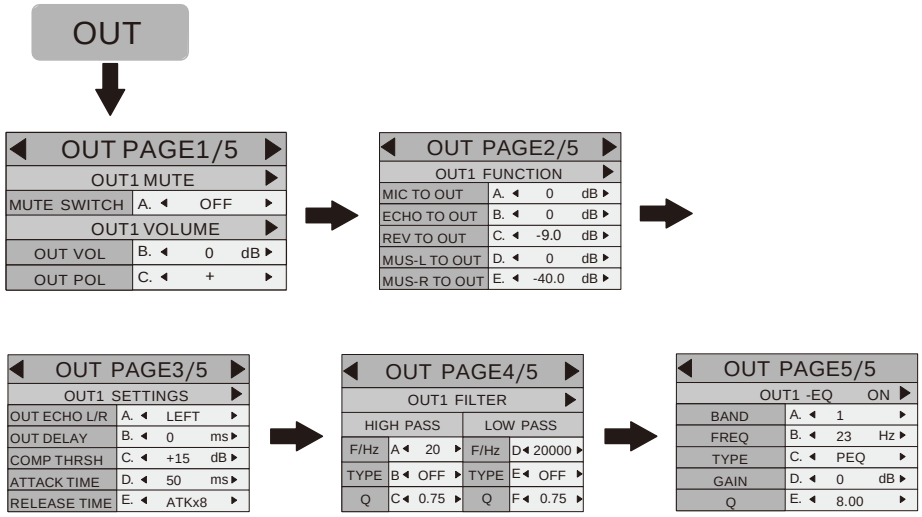
LS Shelf: Low-pass Filtering Shelf, manipulates all frequencies below the set frequency;

GAIN: -30~+12dB, allows adjusting the gain of the setting frequency band.

Q: 0.1~128, adjusts the width of the PEQ filter, Lower values, create wider EQ curves (covering wider a wider range of frequency); higher values create narrower EQ curves (covering a much smaller range of frequencies for more surgical EQ work);

HS: High-pass Filtering, 0.1~1.3;

3.4 OUTPUT Setting



PAGE 1/5

OUT 1~8 MUTE

ON/OFF, it is the switch to turn on or off the output signal of OUT 1~8;

OUT 1~8 VOL

Range: -40~15dB, it is used to adjust the volume of output independently to OUTPUT 1~8 when mixed;

OUT 1~8 POL

0 degree (+), 180 degree (-) adjustable, it is used to adjust the phase independently of OUTPUT 1~8.

PAGE 2/5 OUT1~8 FUNCTION

MIC TO OUT 1~8

Volume of microphone direct sound

Range:-40~6dB, it is used to adjust the volume of each microphone to OUTPUT 1~8 when mixed;

ECHO TO OUT 1~8

Range:-40~6dB, it is used to adjust the volume of ECHO independently to OUTPUT 1~8 when mixed;

REV TO OUT 1~8

Range:-40~6dB, it is used to adjust the volume of REVERB independently to OUTPUT 1~8 when mixed;

MUS-L TO OUT 1~8

Range:-40~6dB, it is used to adjust the volume of left channel of MUSIC independently to OUTPUT 1~8 when mixed;

MUS-R TO OUT 1~8

Range:-40~6dB, it is used to adjust the volume of right channel of MUSIC independently to OUTPUT 1~8 when mixed.

PAGE 3/5 OUT1~8 SETTINGS

OUT 1~8 ECHO L/R

Select the left or right channel of music EFFECT to OUTPUT 1~8;

OUT 1~8 DELAY

Range: 0~100ms, it is used to adjust the signal output time of each output independently to OUTPUT 1~8 when mixed, so that the output signal can come out at the same time;

OUT 1~8 COMP THRSH

Range:-25~15dB, it is used to set the level at which limiting begins to occur. For example, any signal level higher than -10dB would trigger the limiter, while any signal levels lower than

-10dB would remain untouched. Generally, for speaker protection, you would want to use limiting, where most of the signal content remains just below the threshold and only the peaks cross the threshold and get limited;

OUT 1~8 ATTACK TIME

Range: 0~200ms, it is used to adjust the attack time of the limiter;

OUT 1~8 RELEASE TIME

Range: Starting time×2~ Starting time×32, it is used to adjust the release time of the limiter.

PAGE 4/5 OUT1~8 FILTER

HIGH PASS

Range: 20Hz~20000Hz

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

LOW PASS

Range: 20Hz~20000Hz

Preset 8 types of High-pass filtering: BL_12, BW_12, LK_12, UR_12, BL_24, BW_24, LK_24, UR_24

Q: UR_12, UR_24 are 0.1~1.3 adjustable, other types are stable.

PAGE 5/5

OUT 1~8-EQ

ON/OFF, it is the switch to turn on or off the OUTPUT 1~8 editor.

OUT 1~8 EQ Editor

BAND: 1~9;

FREQ Range: 20Hz~20000Hz;

TYPE: PEQ: Manipulates a set range of frequencies, out in both directions from the center frequency, with the “Q” parameter determining the width;

HS Shelf: High-pass Filtering Shelf, manipulates all frequencies above the set frequency;

LS Shelf: Low-pass Filtering Shelf, manipulates all frequencies below the set frequency;

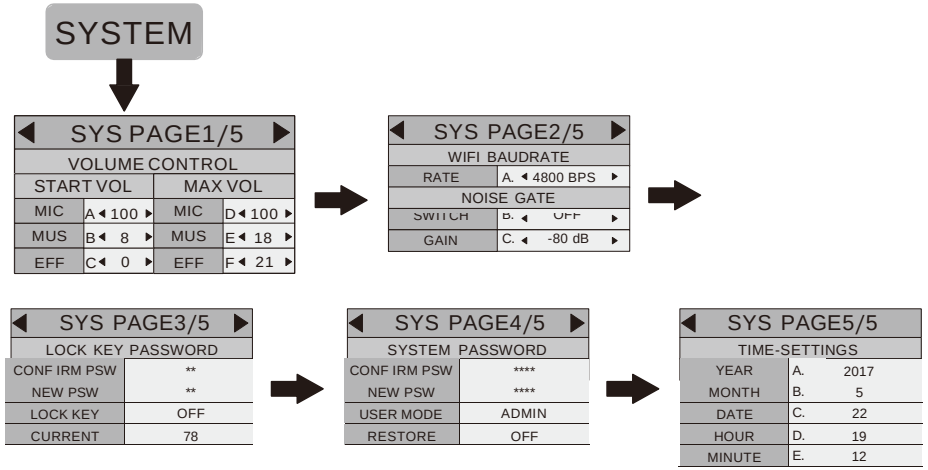
GAIN: -30~+12dB, allows adjusting the gain of the setting frequency band;

Q: 0.1~128, adjusts the width of the PEQ filter, Lower values, create wider EQ curves (covering wider a wider range of frequency); higher values create narrower EQ curves (covering a much smaller range of frequencies for more surgical EQ work);

HS: High-pass Filtering, 0.1~1.3;

LS: Low-pass Filtering, 0.1~1.3.

3.5 SYSTEM Setting



PAGE 1/5 VOLUME CONTROL

MIC START VOL

Range: 0~Value of MIC maximum volume, it is used to set the initial Microphone volume when the device is boot up.

MIC MAX VOL

Range: 0~100, it is used to set the absolute maximum limit to which the MIC volume can be set.

MUSIC START VOL

Range: 0~Value of Music maximum volume, it is used to set the initial Music volume when the device is boot up.

MUSIC MAX VOL

Range: 0~100, it is used to set the absolute maximum limit to which the Music volume can be set.

EFFECT START VOL

Range: 0~Value of Effect maximum volume, it is used to set the initial Effect volume when the device is boot up.

EFFECT MAX VOL

Range: 0~100, it is used to set the absolute maximum limit to which the Effect volume can be set.

PAGE 2/5

WIFI BAUDRATE

4800BPS/9600BPS/14400BPS/19200BPS/38400BPS/56000BPS/57600BPS/11500BPS

Select the corresponding Baudrate for connecting by the RS232 port.

NOISE GATE SWITCH

ON/OFF, it is the switch to turn on or off the Noise Gate.

NOISE GATE GAIN

Range: -80dB~-50dB, 3dB for each degree, when the Noise Gate is turn on, the signal higher than the setting level will pass, and the one lower than it will be decayed.

PAGE 3/5 LOCK KEY PASSWORD

CONFIRM PSW

Type in the 2-numbers original password to unlock the lock key(Factory default password:00);

NEW PSW

Type in a new 2-numbers new password;

LOCK KEY

ON/OFF, it is used to set ON or OFF state of the key lock by entering a correct lock key password.

CURRENT

Boot times,the value will add I each time the device is boot up.

PAGE 4/5 SYSTEM PASSWORD

CONFIRM PSW

Type in the 4-numbers original password to unlock the system editing menu(Factory default password:1234);

NEW PSW

Type in a new 4-numbers new password;

USER MODE

ADMIN: Users can view, set and save all the parameters under this mode.

USER: Users can only view and set the parameters but not save them.

RESTORE

Restore the factory setting: Pressing OFF on the screen, enter into system password page then type in the password and press OK, if it is correct, press BACK, press one more time the OFF and comes out the words LONG PRESS OUT, finally long press the OUT/CONTROL knob to restore the system.

PAGE 5/5 TIME-SETTINGS

YEAR:

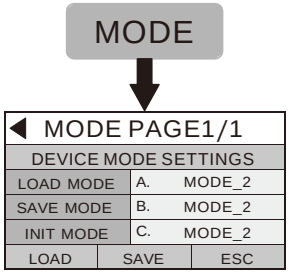
MONTH:

DATE:

HOUR:

MINUTE:

3.6 MODE Setting



PAGE 1/1 DEVICE MODE SETTINGS

LOAD MODE

Mode selection: MODE_1~10, 10 modes are preset for users to download when needed.

SAVE MODE

Mode selection: MODE_1~10, 10 modes are preset for users to save the modified parameters.

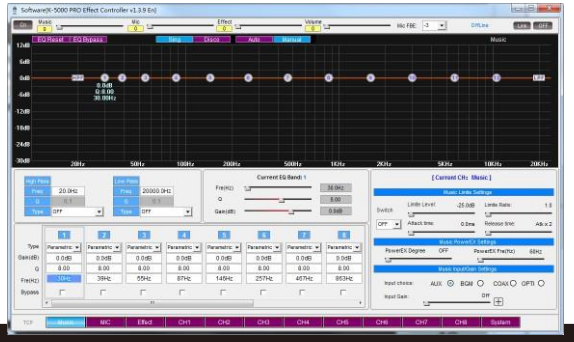
INT MODE

Mode selection: MODE_1~10, 10 modes are preset for users to select when the device boot up.

Section 4 – Appendix

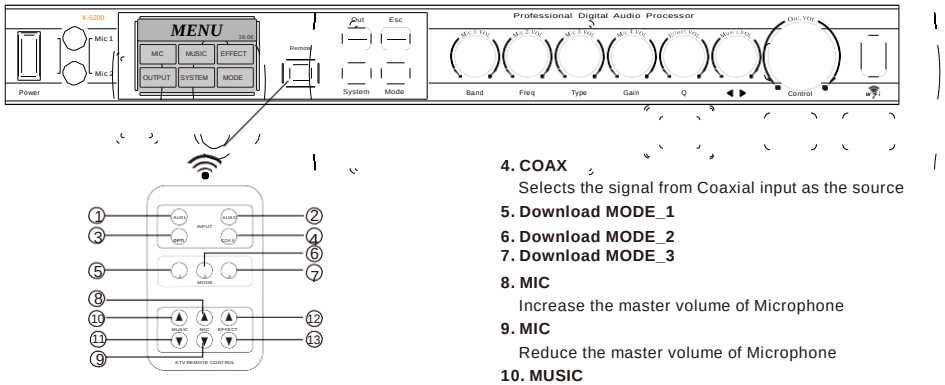
4.1 USB/WIFI Connection

Users can edit the parameters on Software GUI on PC. Please download the Software GUI from the disk packed with the device, then connect the K-5200 to PC via USB port (on the rear panel) or WIFI (on the front panel with specified WIFI emitter) to operate.
System Requirement: Microsoft system, including Windows XP/Vista/7/8/10.



4.2 Remote Control

Users can use the remote control which is packed with K-5200 to set the device.



1. AUX 1
Selects audio signal from AUX 1 as the source

2. AUX 2
Selects audio signal from AUX 2 as the source

3. OPTI
Selects the signal from Optical input as the source

4. COAX
Selects the signal from Coaxial input as the source

5. Download MODE_1

6. Download MODE_2

7. Download MODE_3

8. MIC
Increase the master volume of Microphone

9. MIC
Reduce the master volume of Microphone

10. MUSIC
Increase the master volume of Music

11. MUSIC
Reduce the master volume of Music

12. EFFECT
Increase the master volume of Effect

13. EFFECT
Reduce the master volume of Effect

4.3 Restore Factory Setting

Restore Factory Setting will delete all User mode settings (MODE_1~10) and restore all parameters back the factory default setting. To restore factory setting, please follow the below steps:

1. Reset by the device's touch screen and knob. Enter the SYSTEM menu to PAGE 4/5, press OFF on the screen, enter into the system password page then type in the password and press OK, if it is correct, press BACK, then press one more time the OFF and comes out the words LONG PRESS OUT, finally long press the OUT/CONTROL knob to restore the system.
2. Reset by Software GUI. Connect K-5200 to PC by USB or WIFI, open the software GUI, enter the SYSTEM menu and find the RESTORE FACTORY SETTING, then click RECOVERY, wait till the reset procedure is finished, finally restart the K-5200.

4.4 Technical Specifications

Microphone Inputs:
SNR: 113dB
THD: ≤0.005%（20Hz~20KHz)
Frequency Response: 20Hz~20KHz（±5dB）
Max Input Level: -11.2dbu
Max Output Level: +14.8dbu
AD: 192KHz 24bit SNR:107dB
DA: 192KHz 24bit SNB:112dB
Input Impedance: 10K Ohm

Music Inputs:
SNR: 115dB
THD: ≤0.005%（20Hz~20KHz)
Frequency Response: 20Hz~20KHz（±5dB）
Max Input Level: +2.73dbu
Max Output Level: +14.8dbu
AD: 192KHz 24bit SNR:114dB
DA: 192KHz 24bit SNB:112dB
Input Impedance: 22K Ohm

Audio Performance:
SNR:＞115dB
Frequency Response: 20Hz~20KHz（±5dB）
Output impedance: 300 Ohm
DSP Processor: 32bit

4.5 Packing List

1 Unit of K-5200
1 Owner's Manual
1 Power Cable
1 Pair of Corner Connectors for installing K-5200 into the Cabinet (with screws)
1 Software GUI disk
1 Cable with USB Port