

Digital Karaoke Processor DK3



Owner's Manual

Contents

1.	Safety Instruction	2
2.	Product Features	3
3.	Front Panel Review	4
4.	Rear Panel Review	5
5.	Power-on	6
6.	Music Part Operating Instruction	7
	6.1. Music Input Line Option	7
	6.2. Music Volume Setting	7
	6.3. Music Tone Set	7
	6.4. Music PEQ Setting	8
	6.5. The Maximum Volume Setting	8
	6.6. Music Noise Gate Setting	8
	6.7. The Music Low-Cut Set	8
7.	Microphone Part Instruction	8
	7.1. Microphone Input and Potentiometer Setting	8
	7.2. Microphone Volume Setting	8
	7.3. Microphone Enhancement Feature	9
	7.4. Microphone Optimization Setting	9
	7.5. Microphone Noise Gate Setting	9
	7.6. Microphone Feedback Elimination Setting	9
	7.7. Microphone High & Low-Cut Setting	9
	7.8. Microphone 1 to 5 Volume Setting	10
	7.9. Microphone PEQ Setting	10
	7.10. Microphone Direct Sound Volume, Phase Setting	10
	7.11. The Effect Volume Settings	11
	7.12. The High and Low-Cut of Effect Setting	11
	7.13. The Effect of the PEQ Setting	11
	7.14. Echo Volume & Phase Setting	12
	7.15. Echo Delay Setting	12
	7.16. The Maximum Volume of Effect Setting	12
	7.17. Echo Mode, Echo Thickness Setting	13
	7.18. The Reverberation Volume & Phase Setting	13
	7.19. Reverb Pre-Delay & Reverb Time Setting	13
	7.20. Reverb Type Setting	14
8.	The Main Output Setting Instruction	14
	8.1. Main Output Volume, PEQ Setting	14
	8.2. Direct Sound to the Main Output Volume Setting	15
	8.3. Music to Center Volume Setting	15
	8.4. Main Output PEQ Setting	15
	8.5. Left & Right Delay Settings of Main Output	16
	8.6. The Main Output Limit Setting	16

9. Center Part Operating Instruction	17
9.1. Center Volume Setting	17
9.2. Direct Sound to the Center Volume Setting	17
9.3. Center Musical Delay Setting	17
9.4. Center PEQ	18
9.5. Center High & Low-Cut Settings	18
10. The Sub Woofer Operating Instruction	19
10.1. Sub Woofer Level and Phase Setting	19
10.2. Sub Woofer High & Low-Cut Setting	19
10.3. Sub Woofer PEQ Setting	20
10.4. Sub Woofer Music Delay Setting	20
10.5. Sub Woofer Limit Setting	21
11. Program/Memories Management Function	20
11.1. Program Saved Feature	21
11.2. Program Recall Feature	21
11.3. Program Delete Feature	22
11.4. Program Data is saved to the Computer Feature	22
11.5. Program Upload Data to the Processor	22
12. Power-On to Load the Selected Program	22
13. Volume, Maximum Gain Limit Function	22
14. Volume Fader Function	22
15. Sub Woofer Output Option	23
16. Music Pitch Auto-Recovery Function	23
17. Panel Lock, Parameter Lock Function	23
17.1. Panel Lock Function	23
17.2. Parameter Lock Function	23
18. Power-On Reset Function	23
19. Screen Automatically Return to Stant Menu	23
20. Language Selection Function	23
21. The Wireless Remote Control	24
21.1. Wireless Remote Control	24
21.2. Line Remote Control	24
22. Computer Interface Software Control Function	25
23. Install the software to PC	25
24. Accessories	25
25. Technical Specification	26

IMPORTANT SAFETY INSTRUCTIO



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED PERSONNEL



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenace (servicing) instruction in the literature accompanying the appliance.

Please see below basic protection proceeding before using:

- 1. Please read all the safety instruction before using the product.
- This product must be earthed. If it should be malfunction or break down, grounding provides a path of least resistance for electric current to reduce risk of electric shock.

This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and earthed in accordance with all local codes and ordinance.

DANGER- Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

- 3. To reduce the risk of injury, close supervision is necessary when the product is used near children.
- 4. Do not use this product near water-for example, near a bathtub, washbowl, kitchen sink, in wet basement or near a swimming pool or the lake.
- 5. This product may be capable of producing sound levels that cloud cause permanent hearing loss. Do not operate for a long period of time at high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- 6. This product should be located so that its location or position does not interfere with its proper ventilation.
- 7. This product should be located away from heat sources such as radiators, heat registers or other products that produce heat.
- 8. The product should be connected to a power supply only of the type described on the operation instructions or as marked on the product.
- 9. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
- 10. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time. When unplugging the power-supply cord, do not pull on the cord, but grasp it by the plug.
- 11. Care should be taken so that object do not fall and liquid are not spilled into the enclosure through opening.
- 12. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have been fallen, or liquid has been spilled into the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped or the enclosure damaged..
- 13. Do not attempt to service the product beyond that described in the user-maintenance instructions.
 - All other servicing should be referred to qualified service personnel.
- 14. WARNING- Do not place objects on the product's power cord or place it in a position where anyone could trip over, walk on or roll anything over it. Do not allow the product to rest on or to be installed over power cords of any type. Improper installations of this type create the possibility of fire hazard and/or personal injury.

SAVE THESE INSTRUCTIONS

2. Product Features



- ★ The product uses 56-bit high-performance DSP and 24bit AD / DA, 48kHz sampling frequency of professional digital multi-channel karaoke processor
- ★ High performance professional concerts effect (reverb, echo, dual-echo, reverb + echo).
- ★ Feedback eliminating multi-level options.
- ★ 15-level stereo digital keying music tone.
- ★ 7-band parametric equalizer filter for Music(can be set to a low -shelf/ high-shelf filter).
- ★ 10-band parametric equalizer filter for Microphone (can be set to low shelf//high-shelf filter).
- ★ 3-band parametric equalizer filter for Effect (can be set to low shelf//high-shelf filter).
- ★ 5-band parametric equalizer filter for Main Output(can be set to low shelf//high-shelf filter).
- ★ 3-band parametric equalizer filter for Sub Woofer (can be set to low shelf//high-shelf filter).
- ★ 3-band parametric EQ filter equalizer filter for Center (can be set to low shelf//high-shelf filter).
- ★ 3 group audio-video automatic priority input and background music (BGM).
- ★ Knob parameter adjustment of all-digital operation more convenient.
- ★ VOD interface (RS232).
- ★ Computer interface software connect to unit via RS232, USB ports, all parameters adjustable.
- ★ Extremely low noise.
- ★ Subwoofer volume

Automatic mode: volume automatically switch between concert and dance.

Manual mode: remains unchanged

- ★ Power-on program loading option: Keep the last program before turning off ; User program 1-4
- ★ 132 * 32 dot-matrix LCD screen, display more intuitive.
- ★ Large capacity storage: 15 preset, 30 user programmable.

3. Front Panel Review



- 1. 3-ways Microphone Input Jack and Volume Control on front panel
- 2. 132 * 32 dot-matrix LCD Display is used to Display a Variety of Menus and Parameter Adjustment Information.
- 3. Infrared Remote Control Receiver Window
- 4. User Programming Button
- 5. Storage Program Button
- 6. Menu Parameter Switch Key (in the start-up screen show the music rising tone, falling tone)
- 7. Microphone Enhance Button
- 8. Microphone Mode Button
- 9. Effect Mode Button
- 10. Music Mode Button
- 11. Main Output Mode Button
- 12. Center Mode Button
- 13. Subwoofer Mode Button
- 14. Music Volume Knob ("edit" function in the menu screen, adjust menu parameters, "ress " function is switch other parameters in the same menu screen)
- 15. Microphone Volume Knob
- 16. Effect Volume Knob
- 17. USB Connection

4. Rear Panel Review



- 1. Power Switch (T1AL/250VAC)
- 2. Standard IEC Power Input (~ 90V-220V)
- 3. RS232 Interface
- 4. Digital Audio Output (S / PDIF)
- 5. The OPTIC Interface (Fiber interface)
- 6. Main Output
- 7. Remote Line Interface (External remote receiver)
- 8. 3-way Video Inputs: the background music (BGM) "," Input 1 "," Input 2 "
- 9. 1-way Video Output Interface (Selected from the 3-way input signal as the output signal)
- 10. Audio Input Level Adjustment Potentiometer
- 11. Stereo Audio Input Interface: the background music (BGM) "," Input 1, Input 2
- 12. Auxiliary Output (Use as surround output)
- 13. Recording Output
- 14. Sub Woofer Output
- 15. Right Main Output
- 16. Left Main Output
- 17. Microphone Inputs
- 18. Record Adjust

5. Power-on

Connect power cable, press the power switch on the rear panel, led will show product logo on screen.

Then the version No#, the processor unit starts loading data

(the boot loaded data can be set after the reboot, there are 5 options:

[the last memory before turn-off], [1-4 user program], here show the selected set).



Loading is complete, display date on screen, as follows:



The boot screen shows the current microphone volume, music volume, effect volume

3-lines character and icon meaning is as follows:

The music input line (BGM/IN1/IN2)

Panel lock (" 💾 ", means the panel has been locked, no display indicates unlocked)

Encoder lock ("]" means some parameters have been locked, no display indicates unlocked)

Subwoofer mode (" **1**" means concert mode, "**J**" means dance mode, no display indicates manual mode)

Musical input format ("A" represents the analog input "D" represents a digital input "44,48,32" represents the sampling rate)

Music pitch ("」)

Feedback eliminator status ("FBX1-5" indicates feedback eliminate grade 1-5, no display indicate feedback eliminator function closed)



6. Music Part Operating Instruction

- 6.1 Select Music Input
 - 6.1.1 Analog Music Input

3-way analog music input line: background music, Input 1, Input 2

Potentiometer adjustment function, adjustment range: - 8 ~ +3 db

- Method 1: (1) Keep pressing panel "Music Mode" or select "Music Input" on screen, see below:
 - (2) Turning knob "Music Volume / Edited (Pressed)" to set music input lines.



Method 2: Use own windows software to control.

6.2 Music Volume Set

Range: Mute,-30db ~ 0db, Stepping: 0.5db Method 1: Panel knob "usic volume" set. Method 2: Adjust volume "Music + " "Music-" on Remote Control.





Remote Control View

Method 3: Use own windows software to control.

6.3 * Music Tones

Range: b 7, b 6, b 5, b 4, b 3, B 2, B 1. ##1, #2, #3, #4, #5, #6 and #7 Method 1: Press the key on the panel " <" and " >" to set the music tone. Method 2: Remote Control "b" "**4**" "button to adjust.



Front Panel View

Remote Control View

Method 3: Use own windows software to control.

6.4 Music PEQ Setting

PEQ: 7 bands

Type: Parametric equalization filters(can be set as low/high-tone filter), graphic equalization (the 7th band can be set up as a high-cut).

Frequency range: 20Hz - 20kHz

Gain range: - 15db ~ + 12 db(can be limited to +6db in the "evice Settings" of interface software), stepping is 0.1 db

Band range: 0.011 ~3.595

Method 1: (1) Press "Music Mode" on panel continuously to enter the Music menu EQ.





Front Panel View



(2) Press the " <" and " >" set the EQ.

(3) Rotate the knob " music volume/edit (press)" to set the gain ".

Method 2: Use own windows software to control. (All the EQ parameters can be set)

6.5 The Maximum Volume Setting

Range: mute,-30db ~ 0db, Stepping: 0.5db

Method 1: Keep pressing button "music mode" to the maximum music volume screen, as below:



Front Panel View

Method 2: Use own windows software to control.

6.6 Music Noise Gate Setting

Scope: On and Off Operation: Use own windows software to control.

MUS MAX GAIN 0.0dB

Led Display View

6.7 Music low-Cut Setting Range: OFF, 20Hz ~200Hz, stepping 5 Hz Operation: Use own windows software to control.

7. Microphone Part Instruction

7.1 Microphone Input & Potentiometer SettingThere are a total of 5 microphone connector, 3 on the front panel, 2 on rear panel.3 Microphone on the front panel with Level Adjust input, in general, set in the middle is best.



Range: mute, -25dB~+6dB, stepping 0.5 dB

Method 1: Panel Knob "Microphone volume" set" on near panel.

Method 2: Operation on the remote control "microphone +", "microphone - ".

Method 3: Use own windows software to control.



Front Panel View



Remote Control View

7.3 Microphone Enhancement Feature

Range: Adjust range - 50% (off) ~ + 50 %

Method 1: On the panel press the key "Music Enhance", set to continuously change enhance switch, turn the knob to adjust music inspired.

Method 2: Use own windows software to control.



7.4 Microphone Optimization Setting Range: Off, Popular, Professional Operation: Use own windows software to control.

7.6 Microphone Feedback Elimination Setting



Led Display View

7.5 Microphone Noise gate Setting Range: Off, On Operation: Use own windows software to control.

Range: Off, Grade between 1 to 5 Method 1: Press panel button "microphone mode" till Feedback elimination on the screen, turning the knob

"Music volume / Edit(Press) "to set the sensitivity.





Remote Control View

Method 2: Use own windows software.

When the singer handheld microphone facing the speaker is singing, often occur howling/whistle, the phenomenon often makes the listener feel irritable, serious cases will damage the speaker and amplifier. Adjustment the feedback elimination setting, howling will be eliminated automatically, effective protection of the speaker and amplifier.

Method 3: Remote control "feedback inhibition" setting.

7.7 Microphone High-cut, Low-cut Setting

Low-cut range: 20hz ~ 200hz, stepping 5hz

High-cut range: 12khz ~ 20khz, stepping 0.5khz

Method 1: (1) Press the panel button "microphone mode "into the microphone menu, selected to the

- microphone low-cut, high-cut screen, as shown below:
- (2) Press "<" and ">" switch Low-cut and High-cut.
- (3) Turning knob "Music Volume / Edit (Press) " to set.



7.8 Microphone 1 to 5 Volume Setting

Range: mute, -25dB~+6dB, stepping 0.5 dB

Method 1: (1) Press the panel button "microphone mode "into the microphone menu.

(2) Continue press the button "microphone mode " to select the microphone 1/2/3/4/5 volume on the screen, turning the knob "Music volume / Edit(Press) "to set the sensitivity.



Front Panel View

Method 2: Use own windows software to control.

7.9 Microphone PEQ Setting

Balanced qty: 10

Type: parametric equalization filter (can be set to low / treble tone filter), graphic equalizer

Frequency range: 20hz ~ 20khz

Gain Range:-15db ~ +12 db (can be limited to +6db settings, setting from "Device Settings" in the interface software), step 0.1db

Bandwidth range: 0.011 to 3.595

Method 1: (1) Keep pressing the panel button "microphone mode " till show MIC PEQ (Panel only set the gain of equalizer election), as below:

- (2) Buttons "<" and ">" to select the desired setting PEQ.
- (3) Turning knob music volume / edit (press) to set the gain.



MIC PEQ1	80.3Hz + 5.9
+ 6	
- 6	

Led Display View

Method 2: Use own windows software to control. (All equalizer parameters can be set)

7.10 Microphone Direct Sound Volume, Phase Setting

Volume range: 0% ~100%, Stepping: 1%

Phase range: 0 ° 180°

- Method 1: (1) Press the panel button "microphone mode " or select "MIC DIR VOL, PHASE " on screen, see below:
 - (2) Press "<" and ">" to switch Direct Sound and Phase.
 - (3) Turning knob "Music Volume / Edit (Press) " to set.





Front Panel View

Led Display View

Method 2: Use own windows software to control.

7.11 Effect Volume Setting

Range: mute,-30db ~ 0db, Stepping: 0.5db Method 1: Set by "effect volume" knob on the panel. Method 2: "Effect +", "Effect - " on the remote control. Method 3: Use own windows software to control.





Front Panel View

Remote Control View

7.12 Effect High-cut, Low-cut Setting

Low-cut range: OFF, 50hz - 200hz, stepping 5hz High-cut range: 8khz ~ 16khz, OFF, stepping 0.5khz Operating: Use own windows software to control.

7.13 Effect PEQ Setting

The PEQ qty: 3

Type: parametric equalization filter (can be set to low / treble tone filter), graphic equalizer

Frequency range: 20hz ~ 20khz

Gain Range:-15db ~ +12 db, step 0.1db

Bandwidth range: 0.011 to 3.595

Method 1: (1) Press the panel button "Effect Mode" until show EFF PEQ (Panel only set the gain of equalizer), as below:

(2) Press "<" and ">" to select the desired setting PEQ.

(3) Turning knob "Music Volume / Edit (Press) " to set gain.



Front Panel View





Led Display View

Front Panel View

Method 2: Use own windows software to control. (All equalization parameters can be set)

7.14 Echo Volume, Phase Setting

Volume range: mute,-30db ~ 0db, Stepping: 0.5db

Phase range: 0°, 180 °

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "ECHO VOL, PHASE" on screen, see below:

(2) Press "<" and ">" to switch Echo Volume and Phase.

(3) Turning knob "Music Volume / Edit (Press) " to set.





Front Panel View

Led Display View

Method 2: Use own windows software to control.

7.15 Echo Delay Setting

Delay range: 100ms-600ms Stepper: 5ms "

Depth range: 0% -100%, Stepping: 1%

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "ECHO DELAY, ECHO DEPTH" on screen, see below:

- (2) Press "<", ">" Switching Echo Delay and Depth.
- (3) Turning knob "Music Volume / Edit (Press) " to set.



Front Panel View

ECHO DELAY 200ms ECHO DEPTH 60%

Led Display View

Method 2: Use own windows software to control.

7.16 Effect Maximum Volume Setting

Range: mute, -30db ~ 0db Stepping: 0.5db

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "EFF MAX VOL" on screen, as below: (2) Turning knob "music volume / edit (press) "to set the maximum volume.



Front Panel View





EFF MAX VOL 0.0dB

Front Panel View

7.17 Echo Mode, Echo Thickness Setting

Range: Single, stereo, dual echo

Range: On, Off

- Method 1: (1) Press the buttons "Effect Mode" on the panel or select "ECHO MODE, ECHO TO REV" on screen, see below:
 - (2) Press "<" and ">" Switch Echo Pattern and Thickness.
 - (3) Turning knob "Music Volume / Edit (Press) " to set..





Front Panel View

Led Display View

Method 2: Use own windows software to control.

7.18 Reverb Volume, Phase Setting

Volume range: mute,-30db ~ 0db Stepping: 0.5db

Phase range: 0°, 180°

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "REV VOL, PHASE" on screen, see below:

(2) Press "<" and ">" switch Reverb Volume and Phase.

(3) Turning knob "Music Volume / Edit (Press) " to set.





Front Panel View

Led Display View

Method 2: Use own windows software to control.

7.19 Reverb Pre-delay, Reverb-time Setting

Reverb pre-delay range: 0-250ms Stepping: 10ms

Reverb-time range :0.5-6s Stepping: 0.1s

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "REV PRE-DELAY, REV TIME" on screen, see below:

- (2) Press "<" and ">" switch Reverb Pre-delay and Reverb-Time.
- (3) Turning knob "Music Volume / Edit (Press) " to set.



Method 2: Use own windows software to control.



Front Panel View

7.20 Reverb Type Setting

Range: 1.off; 2. Room; 3 Small hall; 4.Hall; 5. Church; 6. Cathedral; 7. Vocal.

Method 1: (1) Press the buttons "Effect Mode" on the panel or select "REC TYPE" on screen, see below: (2) Turning knob "Music Volume / Edit (Press)" to set the Reverb Type.



Front Panel View



Led Display View



Front Panel View

8. The Main Output Setting Instruction

- 8.1 Main Output Volume, Balance Setting
 - Range: mute,-30db ~ 0db Stepping: 0.5db

Method 2: Use own windows software to control.

Method 1: (1) Press the buttons "Main Output Mode" on the panel or select "MAIN OUT VOL, MAIN BALANCE LR" on screen, see below:

- (2) Press "<" and ">" to switch the main output volume and main output balance.
- (3) Turning knob "Music Volume / Edit (Press) " to set.





Led Display View



Front Panel View

Method 2: Press key "balance + " and" balance - " on remote control.

Method 3: Use own windows software to control.



Remote Control View

- 8.2 Direct Sound to the Main Output, and the Effect to the Main Output Volume Setting Range: Mute, -30db ~ 0db Stepping: 0.5db
 - Method 1: (1) Press the buttons "Main output Mode" on the panel or select "MIC DIR TO MAIN, EFF TO MAIN" on screen, see below:
 - (2) Press "<" and ">" to switch the Needed Parameters.
 - (3) Turning knob "music volume / edit (press) "to set.





Method 2: Use own windows software to control.

8.4 Main Output PEQ Setting

The PEQ qty: 5

Type: parametric equalization filter (can be set to low / treble tone filter) and graphic equalizer Frequency range: 20hz ~ 20khz

Gain Range: -15db ~ +12 db, step 0.1db Bandwidth range: 0.011 to 3.595

Methods 1: (1) Press the buttons "Main output Mode" on the panel or select "MAIN PEQ1" on screen (Panel can only set the equalizer gain), see below:

- (2) Press "<" and ">" to switch the Needed PEQ.
- (3) Turning knob "Music Volume / Edit (Press) "to set Gain.



		<u>0.0</u>
+ 6	\sim	
- 6		

Led Display View

Method 2: Operation from the interface software to set up (all equalizer parameter can be set)



Front Panel View

- 8.5 Main Output Left Delay, Right-delay Setting Range: 0.0ms ~ 5.0ms Stepping 0.1ms
 - Method1: (1) Press the buttons "Main output Mode" on the panel or select "MAIN OUT DELAY" on screen. (2) Turning knob "Music Volume / Edit (Press) "to set.

Method 2: Use own windows software to control.

- 8.6 Main Output Compression Setting Threshold range: -20 ~ +16 db Stepping 0.5db Ratio: 2:1 4:1 8:1 16:1 32:1 64:1 128:1 Range: On, Off
 - Method1: (1) Press the buttons "Main Output Mode" on the panel or select "MUS COMP, THRES RATIO" on screen (Only can set Threshold range and Ratio), see below:
 - (2) Keys "<" and ">" to switch the Threshold Rang and Ratio.
 - (3) Turning knob "Music Volume / Edit (Press) " to set.



Front Panel View



Led Display View

Method 2: Use own windows software to control.



9. Center Part Operating instruction

- 9.1 Center Volume Setting Range: Mute, -30db ~ 0db Stepping: 0.5db
 - Method 1: (1) Press the button "Center Mode" on the panel or select "CENT VOL, CENT MAX VOL" on screen, see below:
 - (2) Press "<" and ">" to switch the Center Volume and Microphone Maximum Volume.
 - (3) Turning knob "Music Volume / Edit (Press) " to set.





Front Panel View



Method 2: Press on the key "Center +" and "Center -" on the remote control. Method 3: Use own windows software to control.







Remote Control View

- 9.2 Direct Sound to the Center, Effect to the Center Volume Setting Range: mute,-30db ~ 0db Stepping: 0.5db
 - Method 1: (1) Press the buttons "Mic Mode" on the panel or select "MIC DIR TO CENT, EFF TO CENT" on screen, see below:
 - (2) Press "<" and ">" to switch Direct Sound to the Center and Effect to the Center.
 - (3) Turning knob "Music Volume / Edit (Press) " to set.



Front Panel View

9.3 Center Music Delay, and the Music to Center Volume Setting

Center Music delay range: 0 ~ 5ms Stepping 0.5ms

Music to the Center volume range: Mute,-30db ~ 0db Stepping: 0.5db

Method 1: (1) Press the button "Mic Mode" on the panel or select "CENT DELAY MUS TO CENT" on screen, see below:

(2) Press "<" and ">" to switch Direct Sound to the Center and Effect to the Center.(3) Turning knob "Music Volume / Edit (Press) " to set.



Front Panel View

CENT DELAY: 0.0ms MUS TO CENT: 0.0dB

Led Display View

Method 2: Use own windows software to control.



Front Panel View

9.4 Center PEQ Setting

The PEQ qty: 3

Type: parametric equalization filter (can be set to low / treble tone filter) and graphic equalizer.

Frequency range: 20hz ~ 20khz

Gain Range:-15db ~ +12 db, step 0.1db

Bandwidth range: 0.011 to 3.595

Method1: (1) Press the buttons "Mic Mode" on the panel or select "CENT PEQ" on screen (Only can set EQ gain on the panel), see below:

CENT

+6

(2) Press "<" and ">" to select the needing PEQ.

(3) Turning knob "Music Volume / Edit (Press) " to set gain.



Front Panel View

Method 2: Use own windows software to control.



Led Display View

PEQ1 101Hz

0.0

Front Panel View

9.5 High-cut, Low-cut Setting

Low-cut range: OFF, 20Hz ~ 300Hz, stepping 5Hz High-cut range: 2.5kHz ~ 20kHz, OFF Stepping 0.5khz

Method : Use own windows software to control.

10. The Sub Woofer Part Operating Instructions

- 10.1 Sub Woofer Volume and Phase Setting
 - Volume range: mute,-30db ~ 0db Stepping: 0.5db Phase range: 0 °, 180 °
 - Method 1: (1) Press the buttons "Sub Woofer Mode" on the panel or select "SUB VOL PHASE" on screen, see below:
 - (2) Press "<" and ">" to switch the Sub Woofer Volume and Phase.
 - (3) Turning knob "Music Volume / Edit (Press) " to set gain.



Front Panel View

Led Display View

[0°1

-19.5dB

Method 2: Press the key "Bass +" and "Bass" on Remote Control. Method 3: Use own windows software to control.



Front Panel View



Remote Control View

10.2 High-cut, Low-cut setting

Low-cut range: 19.7 ~ 1000hz, 203 stepper High-cut range: 35.1 ~ 2000hz, 209 stepper

Method 1: (1) Press the button "Sub Woofer Mode" on the panel or select "HPF, LPF" on screen, see below:

- (2) Press "<" and ">" to switch the High-cut and Low cut.
- (3) Turning knob "Music Volume / Edit (Press) "to set gain.



Method 2: Use own windows software to control.



Front Panel View

10.3 Sub Woofer PEQ Setting

PEQ qty: 3

Type: parametric equalization filter (can be set to low / treble tone filter) and graphic equalizer Frequency range: 20hz ~ 20khz Gain Range: -15db ~ +12 db Stepping 0.1db Bandwidth range: 0.011 to 3.595

- Method 1: (1) Press the buttons "Sub Woofer Mode" on the panel or select "SUB PEQ3" on screen (Only can set EQ gain on the panel), see below:
 - (2) Press "<" and ">" to select the needing PEQ.
 - (3) Turning knob "Music Volume / Edit (Press) " to set gain.



Method 2: Use own windows software to control. (all the parameter of EQ can be set)



Front Panel View

- 10.4 Subwoofer Music Delay, Direct Sound to the Subwoofer Volume Setting
 Subwoofer music delay range: 0 ~ 20ms Stepping 0.5ms
 Direct sound to the subwoofer range: MUTE,-30db ~ 0db Stepping: 0.5db
 - Method 1: (1) Press the buttons "MIC Mode" on the panel or select "SUB MUS DELAY " on screen, see below: (2) Press "<" and ">" to switch Subwoofer Music Delay and Direct Sound to Subwoofer Volume.
 - (3) Turning knob "music volume / edit (press) "to set gain.



Front Panel View



Led Display View

Method 2: Use own windows software to control.



Front Panel View

10.5 Subwoofer Compressor Setting

Threshold range: -20 ~ +16 db Stepping 0.5db

Ratio: 2:1 4:1 8:1 16:1 32:1 64:1 128:1

Range: On, Off

- Method 1: (1) Press the buttons "Sub Mode" on the panel or select "SUB COMP THRES" on screen (Only Threshold can be set), see below:
 - (2) Turning knob "Music Volume / Edit (Press) " to set Threshold.



11. Program/Memories Management Function

The processor unit provides 15-preset programs and 30-user programs.

- 11.1 Preset Program
 - Method 1: (1) Press the keys "Save" on the panel, see below:
 - (2) Turning knob "Music Volume / Edit (Press) " to choose the program to save.
 - (3) Press the button " Save" again to save the program.



Method 2: Use own windows software to control.

Front Panel View

(

Save To

User Memory



Led Display View

Front Panel View

11.2 Program Recall

Method 1: Press the keys "1", "2", "3", "4" recall the program directly. Method 2: Remote control, see below:



Front Panel View

Remote Control View

Method 3: Use own windows software to control.

- 11.3 Delete Preset Program (Computer Software Control)
- 11.4 Preset date on the computer (Computer Software Control)
- 11.5 Import data from the computer to processor (Computer Software Control)

12. Turn-On to Load the Selected Program

Connect to the computer, open the software, set the program in "Reboot Effect" from "Device Setting" (Program 1-4; Last program status before turn off).

Programs(memories) 1–4	The default program will be one of 1-4 whether or not making any parameter adjustment before reboot. This feature is to prevent extra work loaded applied to the Musical Technicians
Last program	Default program remains the same to prevent sudden power lost

13. Volume, Maximum Gain Limit Function

Set through the online software interface with the computer: "Device Settings" Maximum volume of the music: Mute,-30db ~ 0db, Stepping: 0.5db Maximum volume of the microphone: Mute,-25db ~ +6 db, Stepping: 0.5db Maximum volume of effect: mute,-30db ~ 0db, Stepping: 0.5db Maximum volume of center: mute,-30db to 0db stepper: 0.5db Maximum volume of subwoofer: Mute,-30db ~ 0db, Stepping: 0.5db The maximum gain of music equalizer : +6.0 db to +12.0 db, Stepping: 0.1db

Volume Limit Feature:

To protect and prevent speakers and amplifier from damaging at a certain range.

To avoid setting high volume destroy the sound field, for example: When the microphone parameter is set to-10db, then the upper limit value of microphone volume is-10db, when using the microphone volume knob on the remote control to adjust the microphone volume, maximum output volume is -10db.

14. Volume Fader Function

Set this function under "Device Settings" in the software provided.

If the "Switching Speed" of its parameters set to fade during power On/off, Recall program, conversion mode, the signal line, the signal is from small to large incremental increase; If the parameter set to "immediately", the signal is changed over directly without fading process.

15. Sub Woofer Output Option

Set this function under "Device Settings" in the software provided.

When the mode is manual, the sub woofer volume setting does not change.

When the mode is automatic: once the Microphone receives input signal, sub woofer output volume is the "concert" setting.

If microphone has no input signal, a certain time later , the sub woofer volume will switch to "ance" setting automatically.

The following parameters are valid only in the automatic mode: concert volume, dance volume The microphone detection threshold: When the microphone detects a level greater than this threshold, then determinate the microphone has input; otherwise determined to be no input.

The microphone detects time: when microphone no-signal input time more than this time, the sub woofer output volume will switch to "Dance" volume setting automatically.

16. Music Pitch Automatic Recovery Function

The music pitch will adjust treble or bass when the user fast to meet the correct tone. It will return to original musical setting.

17. Panel Lock, Parameter Lock Function

17.1 Panel Lock Function

Press the knob [music volume / edit (press)] more than 5 seconds to lock the system Press the Knob [Music volume / Edit (press)] for more than 5 seconds to unlock the system.

17.2 Parameter Lock Function

Use own windows software to control.

18. Power-On Reset Function

Reboot while holding down the keys " Main Output Mode" and "Music Mode" until the display shows as below:



Reset	

Front Panel View

Led Display View

Note: After the reset, the user program will be deleted! Please stored in the computer in advance.

19. Boot Screen Automatically Returns to Stant Memu

System will return to Start-Up screen automatically when no operation in 180s.

20. Language Selection Function

To select your language, press "Center Mode" and "Bass Mode" the same time.

21. The Wireless Remote Control

21.1 Wireless Remote Control

FB)

MIC+

b

MIC-

SUB

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MUSIC

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MUSIC

CENT+

REMOTE CONTROL

EFFECT

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EFFECT

BAL

The easy-to-use remote control function, eliminating the need for manual operation. Simple parameter adjustment makes you to adjust the parameter settings easily as picture shown below:

Keys	Function		
Feedback eliminate	Adjust the feedback elimination		
Digit keys	Press the digit keys to recall the memory directly		
BGM(background music)、 Input 1、Input 2	Adjust the music input line		
"0/30""1~"9" "10+" "20+"	Press digit keys"1""~"9"can recall the memories "1"~"9"; Press the "10 +" firstly, within 3 seconds press "0" ~ "9" can recall the memories 10 ~ 19 Press the "0 +" firstly, within 3 seconds press "0" ~ "9" can recall the memories 20 ~ 299 Press key"0/30"can recall the memory "0" directly.		
MIC+、MIC-	Microphone volume Adjust		
MUSIC+、MUSIC-	Music volume Adjust		
EFFECT+、EFFECT-	Effect volume Adjust		
Demote Tone、Original Tone、Rise Tone	Music Tone Adjust		
SUB+、SUB-	SUB volume Adjust		
Cent+、Cent-	Center volume Adjust		
EQ+、EQ-	Main Left/Right output volume Adjust		

Remote Control Keys Function

Sheet 1 (The Remote Control Code, Data-digit Hexadecimal)

Keys	Code	Keys	Code	Keys	Code	Keys	Code
Feedback Eliminate	00	5	09	MIC -	17	SUB-	1D
Default / user	01	6	08	Music+	12	Center +	1E
Background Music(BGM)	04	7	0B	Music-	18	Center -	1F
Input 1	03	8	0C	Effect+	13	EQ+	1A
Output 2	02	9	0D	Effect-	19	EQ-	1C
1	05	0/30	10	Reduce Tone	16		
2	06	10+	0F	Original Tone	15		
3	07	20+	0E	Rise Tone	14		
4	0A	MIC+	11	SUB+	1B		

21.2 Line Remote Control

This function is an external remote control receiver. Line remote interface defines the following figure:



22. When on-line Computer Interface Software Control the Processor Functions , the Panel Screen can not be Operated the Same Time

COM Port Detect Automatically.

Software can set all the parameters of the processor.

Please refer to the corresponding HELP documentation software instruction.

USB and RS232 cannot operate together. If RS232 interface is needed, please remove USB connection.

23. Install the Softwave to PC

Please read the following instruction carefully before doing the connection.

Or there is more risks on abnormal conditions as offline, computer crash.

- (1) Please assure the AC power applies with the machine working condition.
- (2) The ground connection should be set with AC power.
 - Please use the AC power to connect the computer with the machine.
- (3) Do not install the control software with the same version and model repeatedly.
- (4) Do not load all the software in the same catalogue. Advise to set the separate file folder for saving the software.
- (5) Try to avoid doing the PC software control operation in the condition with strong signal interference.
- (6) The wrong operation will lead to fail controlling and even damage the machine and the computer.a. Do not insert or pull out the connection interface at the power on condition before PC connection..
 - b. Do not move the computer, the machine and the connecting cable after PC connection.
 - c. Do not use the panel operation or touch the key on the panel after PC connection.
 - d. Do not insert or pull out the connection interface of the computer and the machine after successful PC connection.
 - e. Do not use one computer to control several machines.
- (7) Please refer to IMPORTANT SAFETY INSTRUCTION in the user instruction.







Computer

Iterface



24. Accessories

Accessories	Qty
RS232 Computer Communication lines	1
Software CD	1
USB computer communication line	1
Manual	1
Remote Control	1

25. Technical Specification

Music Parts	
SNR	>102dB(BYPASS , Pitch Shift Closed)
THD	0.01% 20Hz-20kHz
Frequency Response	20Hz-20kHz \pm 0.5dB
Input Sensitivity/Impedance	0.707V/47kohm
Max-output	14Vpp/60ohm EQ output
Parametric EQ: 5 bands	
Туре	PEQ、High-shelf、Low-shelf
Gain	+12dB~-15dB,Stepping \pm 0.1dB
Frequency	20Hz~20kHz
Bandwidth	0.011-3.595
Pitch Shift	\pm 7 Levels, Stepping 100 Cents
Stereo Audio Input Level-adjustment	-∞~+0dB
Video: 3-way Video Input, 1-way Video Output	
Input Sensitivity/Impedance	1Vpp/75ohm
Output Sensitivity/Impedance	1Vpp/75ohm
	······································
Sub Woofer Parts	
	0.01% 20Hz-2000Hz
Frequency Response	20Hz-2000Hz +0.5dB
3-bands DEO	
Туре	PEO High-shelf Low-shelf
Coin	± 12 dP \sim 15dP Stopping ± 0.1 dP
Frequency	
Prequency	20HZ~2000HZ
Bandwidin	
MIC Parts	
SND	>100dB(Effect Closed)
Frequency Response	
Input Sensitivity/Impedance	
Max-output	13.8∨рр
7-bands PEQ	
Туре	PEQ、High-sheif、Low-sheif
Gain	+12dB~-15dB, step±0.1dB
Frequency	20Hz~20kHz
Bandwidth	0.011-3.595
5-way MIC Input	
Remote	1-way Line control, 5-pin Socket
KS232	
USB	
Power Voltage	AC 90-250V/50Hz
Fuse	
Power-consumption	10W
Weight	2.2KG
Size	