Nakamichi®

NDSK4065AU

User Manual

DIGITAL SOUND PROCESSOR

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NOTICE

1. To prevent the risk of short citcuits, please keep the device away from water, liquid and wet areas.

2. If water or any other liquid enters the device, please cut of power to the device immediately and contact the nearest service centre for inspection.

3. There are no user-serviceable parts inside the device, please contact the nearest service centre for any repairs or servicing.

4. The surface temperature of the device can go above 80 degrees celcius under prolonged loads, a such please install the device in a safe location.

TROUBLESHOOTING

Please ensure that all cables are securely connected to the corresponding ports before turning on the power.

Common troubleshooting procedures are listed below;

| **when a fault occurs:** Follow the instructions below for commonly encountered problems. | ⇨ | **Issues persist after following suggestions** Please reset theunit to factory settings. | ⇨ | **Issues persist after factory reset** Please contact the nearest service centre. |

Troubleshooting Methods:

No.	Malfunction	Reason and Solution
1	No Power	A. Check the power connection
		B. Check the ACC connection
2	No Sound	A. Is it in mute mode
		B. Have you selected the correct input channel
3	Unable to connect USB	A. Check the USB connection
		B. Check if the driver "HID-compliant device" has been installed in your PC

ACCESSORY LIST

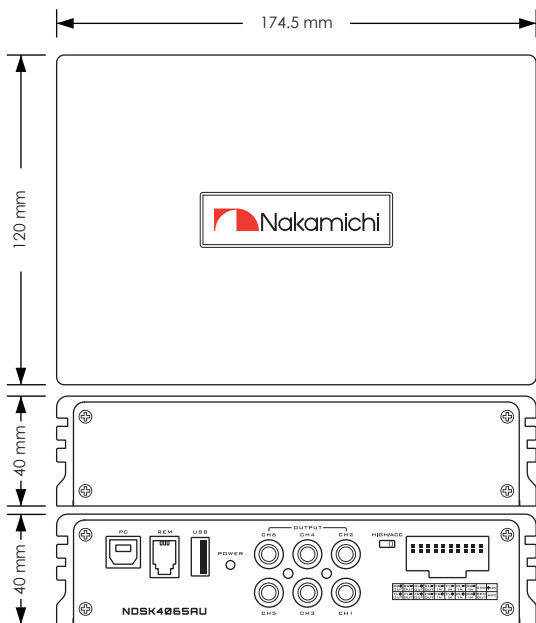|	
1. Amplifier	1pc
2. User Manual	2pcs
3. USB2.0 Cable(1.5m)	1pc
4. Installation Bracket	2pcs
5. Self-Tapping Oval Head Screws(4x20mm)	4pcs
6. Cross Head Mechanical Screws(3x8mm)	4pcs
7. Velcro	2sets

PRODUCT TECHNOLOGY DATA

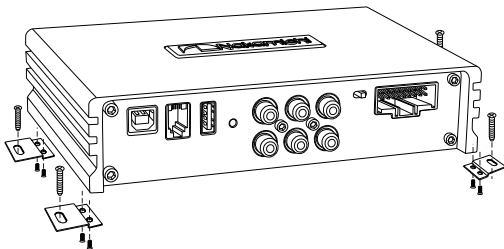| Product Data	
Dynamic Range(RCA Input)	≥100dB
S/N (RCA Input)	≥90dB
Frequency Response	20Hz~20KHz
Input Impedance	High Level Input:240Ω
Low level Output Impedance	≤100Ω
Signal Input	RCA Input: 8Vpp; High Level:26Vpp
Output Range	RCA Output: 12Vpp; Amplifier:4x60W
Working Temperature	-20-70°C
Power	DC9V-16V
REM Input	High Level Input Signal: FL+/FL- or ACC control cable
REM Output	+12V Startup Voltage Output
Standby Power	≤0.1W
Gross Weight	Approx. 0.7kg
Box Dimension(LxHxW)	174.5x120x40mm

All specifications subject to change without notice.

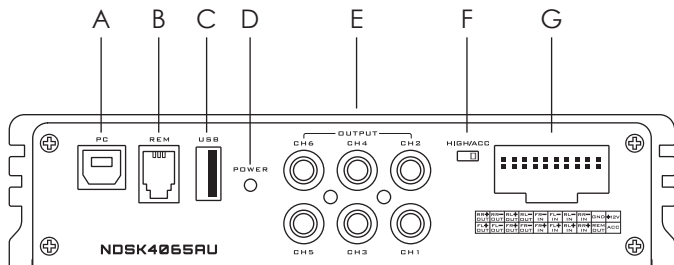| Technical Sheet	
Input Signal Type	4 Channels high level, supports internal Bluetooth and USB music playback.
Output Type	6 Channels low level, 4Channels 60W power
Output Gain	Gain range: Mute, -59dB~6dB
Output Signal EQ	15-band EQ for every channel. 1. Frequency Range:20Hz~20KHz, 1Hz Accuracy 2. Q value(Slope):0.404~28.85 3. Gain:-12.0dB~+12.0dB, 0.1dB Accuracy
Output Signal Crossover	Equipped with high and low pass filters. 1. Professional filter type: Butter-w, Bessel, Link-Ril 2. Filter Crossover Point: 20Hz~20kHz, Resolution 1Hz 3. Filter Slope Setup: 6dB/Oct~24dB/Ovt
Output Phase and Time Alignment	Adjust phase and time alignment for every output channel: In Phase or Out Phase(0°-180°); Time Alignment: 0.000 to 20.000 milliseconds, 0 to 692 cm, 0 to 273 inches.
Presets	Save 6 presets into the device.

DIMENSIONS(UNIT: MM)

174.5 mm

120 mm

40 mm

40 mm

Nakamichi

OUTPUT
CH6 CH4 CH2
PC   REM   USB
POWER
HIGH/ACC

NDSK4065AU
CH5 CH3 CH1

Installation Instruction as Below

PANEL CONTROLS AND FEATURES

A. PC PORT, CONNECT TO THE COMPUTER TUNING SOFTWARE
No need to download the driver installation, connected to the computer sound software installed automatically.

B. REMOTE LEVEL CONTROL PORT
Attach the included remote level control to control the volume level of the subwoofer independently.

C. USB PORT
Insert the U disk, and play the songs in the U disk under the audio source of the player.

D. POWER INDICATOR LIGHT

E. AUX LOW LEVEL OUTPUT PORT
Low level RCA Output, connect up to 6 channel speaker output.

F. MACHINE START MODE SWITCH
When the switch is turned to the "ACC" terminal, the machine is started by ACC, and when it is turned to the "HOST" terminal, the machine is started by the high level input signal.

G. HIGH LEVEL INPUT AND OUTPUT PORT

RR+ OUT	RR− OUT	RL+ OUT	RL− OUT	FR− IN	FL− IN	RL− IN	RR− IN	GND	+12V
FL+ OUT	FL− OUT	FR+ OUT	FR− OUT	FR+ IN	FL+ IN	RL+ IN	RR+ IN	REM OUT	ACC

* "+" is positive or positive; "-" is negative or inverted (ground).
* Olny the special wire for the original car is selected, or the user can define the external wiring material by himself.
* Before connecting the power supply, you confirm that the power supply meets the power requirements of device and connect in strict accordance with the device instructions. Failure to do so may result in damage to the equipment and may cause accidents such as fire, electric shock, etc.

SOFTWARE INTRODUCTION

PC Software Operation Introduction
(PC can be downloaded from the official website (http://www.nakamichicaraudio.com, Downloads))

Computer Configuration Requirements: Scren resoluion higer than 1280 x 768, otherwise the software UI is incomplete, only suitable for windows operation system laptop, desktop and pades

A. Main menu edit section

Main features: Memory, option, mixing, audio and input source selection operations.
* Click on the "Memory" pop-up window and select to load machine preset scenarios or save as preset scenarios or load the scene file on your computer or save it as a scene file on your computer or loading machine scene and save machine scene.
* Click on "Options" to select Chinese and English switching, noise gate, about and restore factory settings.
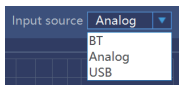
SOFTWARE INTRODUCTION

* Click "Mixer" for mixing interface, the interface may enter the corresponding mixing input source by switching, high level interface is as follows.
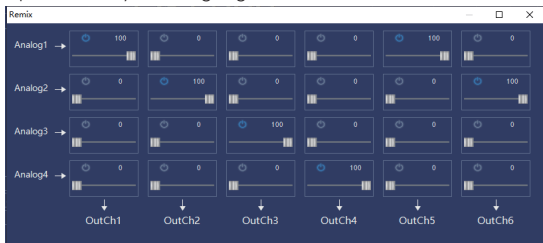
* Click the "Not Connected" button to connect to the host with a PC.

Unconnected ⇨ Connected

* Click on the input source drop-down list to select the input source. Bluetooth, Analog and USB.

B. Channel equalizer editing area

Main function configuration: Equilibrium design of current output channel, 15-band equalization adjustable: frequency, Q value (response bandwidth) and gain (increasing or decreasing the frequency response amplitude near the frequency point).

Among:
* "Reset equalization" button: It is used to restore the parameters of the 15-band equalizer to the original pass-through mode (the frequency of the equalizer, the Q value and the gain are restored to the initial value).

SOFTWARE INTRODUCTION

* Restore Equalizations button: Switch between the currently designed equalizer state parameters and the pass-through mode (the gain of all equalization points is restored to 0dB, the frequency and value are unchanged).
*"GEQ" button: click to select graphic equalization or parametric equalization.
* "Delay Unit" button: Select the delay unit by clicking the left or right arrow, available in milliseconds, centimeters, and inches.
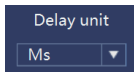
C. Channel divider editing area

Main function Setup: Channel High & Low Pass Filter Setup.
Adjustable: Filter Type, Frequency point and Q Value (Gradient or Slope). When the slope is 6dB/Oct, the type is NULL.
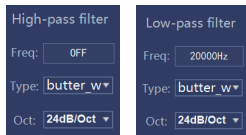
D. Output channel adjustment area

Output channel adjustment aream, positive and negative phase of each channel, volume adjustment, mute, joint adjustment, etc.

* Sound adjustment: slid the scroll up and down to adjust the sound level of the channel, or input the value or scroll the mouse wheel in the sound input box to adjust the sound size. Click the horn button to switch between mute.
* Positive phase adjustment: Click [0°] or [180°] to switch between positive phase and reverse phase.
* Delay: set the delay value by scrolling the mouse wheel in the delay input box, or enter the value to set the delay value.
* Reset output configuration: Customizable for channel type.
* Lock output type: Locking for the current output channel type is not customizable.
* Output left and right joint adjustment: The joint of the left and right channel data of the output channel can be copied from left to right, or from right to left.

E. Main volume adjust zone

Adjustment Range: ON/OFF, -59dB~6dB.
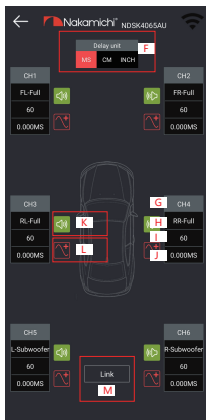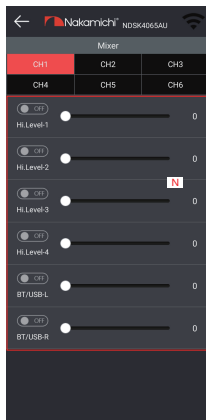Click the speaker button to mute the main volume.

SOFTWARE INTRODUCTION

SMART-PHONE SOFTWARE OPERATION INTRODUCTION APP can be downloaded from the official website (http://www.nakamichicaraudio.com, Downloads)

Home

Output

Mixer

1. **Main Interface**
   Can share sound effects, save audio sound effects, open local sound effects, view the model and version number of the machine and exit the software operation; encrypt the data; store and recall 6 sets of preset scenes.

A. Connection status: Black means not connected, red means connected.

B. Scene preset: There are 1~6 presets to output delay adjustment.

C. Audio source selection: There are Bluetooth, analog and USB options.

D. Volume adjustment:
   press and hold the volume scale clockwise or counterclockwise to adjust the volume. The main volume range is 0~66, The subwoofer

range:0~60, The medium, high and low volume range-12dB~ +12dB. Tap the speaker button to mute the master volume.

E. Menu:
   You can perform operations such as output channel adjustment, Equalizer adjustment, mixing mode adjustment, system settings and music playback.

2. **Channel Interface**
   Channel selection, volume mute, forward and reverse, high and low pass frequency setting and joint tuning operation.

F. Delay unit switching: Switch between milliseconds, centimeters, and inches.

G. Output channel selection: 6 channels are available.

SOFTWARE INTRODUCTION

H. Channel type selection: front audio, rear audio, center audio, subwoofer audio.

I. Channel volume: The volume can be adjusted by sliding left and right, the volume range:0~60.

J. Delay setting: Slide the dots left and right to set the delay value. Delay range:millisecond range:0.000~20.000; cm range:0~692; inch range:0~273.

K. Mute:Click the speaker button to mute.

L. Channel phase: Forward and reverse switching.

M. Channel joint debugging settings: Click the joint debugging button and the joint debugging window will pop up to select the joint debugging method.

3. Mixer Interface

N. Bluetooth/USB-L, Bluetooth/USB-R and 4 analog, and mixing options and adjustment,adjustment range:0~100.

4. EQ Interface
Corresponding to the adjustment of the output channel EQ curve (gain, Q value and frequency); reset equalization, pass-through equalization or parametric equalization operation settings.

O. EQ display: Edit the display area.

P. Reset equalization, parametric equalization, and pass-through equalization settings: Click [Reset] to restore the parameters of the 15-short equalizer to the original factory pass-through mode (equalizer frequency, Q value and gain return to their initial values).
When there is channel adjustment, click [PEQ] to switch between [PEQ] and [GEQ] modes.

Q. HPF and LPF adjustment:
Frequency range:20Hz~20.0kHz.
Channel type: Choose from Link-Rill, Butter-W and Bessel.
Slop selection: 6dB/Oct, 12dB/Oct, 18dB/Oct, 24dB/Oct, 30dB/Oct, 36dB/Oct, 42dB/Oct, 48dB/Oct and OFF can be selected.
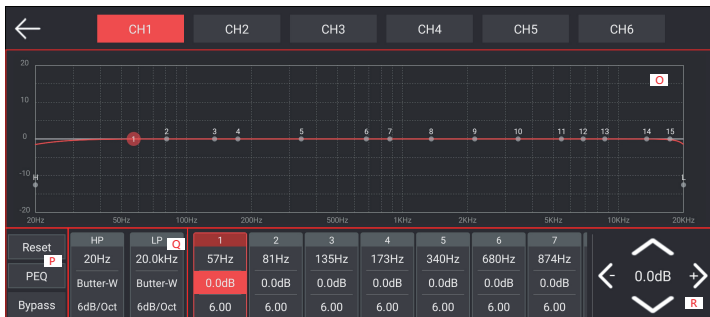
EQ

SOFTWARE INTRODUCTION

R. Output EQ frequency, gain and Q value settings:
   The frequency setting of the output EQ: a total of 15 EQ, slide the screen left and right to select the EQ, you can drag the slide bar up and down to adjust the frequency. The rightmost direction button, press up and down to select the desired frequency, gain and Q value; press left and right to adjust the corresponding adjustment range, frequency range: 20Hz~20kHz, gain range: -20dB~+20dB, Q value range: 0.40~ 128.

5. **System Interface**
   Can be restored to factory settings, noise gate settings, mode settings, check the machine model and version for easy operation.
S. Noise gate setting: 0-22
T. Mode setting: preset PR1~PR6 mode change and save.
U. Turn on local sound effects.

V. Restore factory settings: Click [Restore factory settings], click [OK], all values will be restored to the initial values.

6. **Music Interface**
   When connected to USB, Bluetooth or Level-H, you can select the music inside to play, pause, previous, next, loop, random or single play.

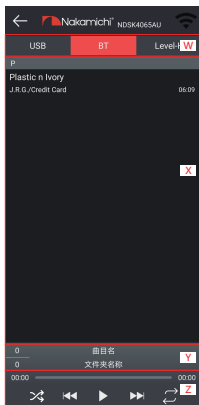W. Select the playback source: USB, Bluetooth or Level-H

X. Playlist (sorted alphabetically)

Y. Song name and folder name of your choice.

Z. Music adjustment: click [▶][❚❚] to play or pause; click [◀◀] to select the previous song; click [▶▶] to select the next song; click [🔁] [🔂] list loop or single loop mode; click [🔀] random loop mode.
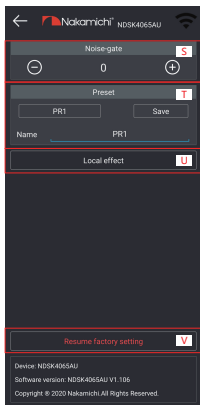
System

Music

SCAN OUR QR CODE OR VISIT
FOR COMPLETE AUDIO SETTINGS INSTRUCTIONS

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