# **Reference 7**

High Definition vacuum music player

## SAFETY INSTRUCTION

To avoid personal injury or damage to equipment, please ensure that you read this manual in its entirety before attempting to operate the equipment. Please retain this manual for future reference.

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT UNDER ANY CIRCUMSTANCES REMOVE ANY PARTS OF THE EQUIPMENT COVER. THERE ARE NO USER SERVICEABLE PARTS INSIDE. ALL SERVICING MUST BE CARRIED OUT BY QUALIFIED SERVICE PERSONNEL.





This icon marks a presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



A

This icon marks important operating, maintenance and service information that should be read to prevent possible personal injury

## WARNINGS

#### **Do Not Disassemble**

Do not attempt to service the equipment beyond that described in this manual. Touching the equipment's internal parts could result in severe personal injury. All other servicing or problems as listed below should be referred to qualified Consonance service technicians:

- The power supply cord or plug has been damaged
- Objects have fallen or liquid has been spilled into the equipment
- The equipment does not appear to function normally or exhibits a marked change in performance
- The equipment has been dropped or the enclosure damaged

Do not under any circumstances allow anyone to modify your Consonance equipment without first checking with Opera Audio, your dealer, or your distributor. Unauthorized modifications will invalidate your guarantee.

#### **Power Source**

The equipment should be connected to a power supply only of the type described in this manual or as marked on the equipment.



#### **Grounding or Polarization**

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the amplifier.



#### Ventilation

The equipment should be situated so that its location or position does not interfere with its proper ventilation.

- 1. The equipment must not be placed on bed, sofa, or similar surfaces, that may block the ventilation openings,
- 2. The equipment must not be placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air.
- 3. The equipment should be situated away from heat sources such as radiators, heat register, stoves, or other electronic appliances that produce heat. This equipment is not intended for commercial use.



#### Water and Moisture

The equipment should not be used near water, e.g., near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool etc. Similarly, do not placed objects filled with liquid, such as vases on top of the equipment.

#### Lighting

Consonance hi-fi system can be damaged by lightning. Power amplifiers are particularly at risk and therefore should be turned off when there is risk of lightning strike. For complete protection all mains plugs and any aerial cables should be disconnected when not in use.



#### **Power Lines**

In case of connecting a tuner, an outdoor antenna should be located away from power lines. If an outside antenna is connected to the system, be sure the antenna is grounded so as to provide some protection against voltage surges and built up of static charges.

#### Cleaning A

Never clean with furniture polish, benzene, or volatile liquids. Dust periodically with a clean, soft paint brush. Fingerprints can be removed with a moist polishing cloth.



### SAFETY INSTRUCTION

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#### Introduction

Thank you for the purchase of the **High Definition vacuum music player**. Opera Audio welcomes you to the growing number of discerning audiophiles who own Opera Audio products. This manual has been prepared to help you to maximize your enjoyment of the performance and features of your new Consonance equipment. Please study this manual carefully and become acquainted with all the features, operation and capabilities of your new Consonance equipment. Should you have any questions, or desire information on other Opera Audio products, please contact your local Opera dealer.

#### Unpacking & Set-up

#### Unpacking

Before any Opera Audio product leaves the factory it is carefully inspected for physical imperfections as a routine part of Opera Audio's stringent systematic quality control. After you have unpacked the equipment, carefully inspect for any physical damage. Save the shipping carton and packing materials as they are essential for future use to reduce the possibility of transportation damage.

#### Set-up

#### Check Equipment Voltage

Ensure that the operating voltage of the amplifier, check the shipping carton label and/or owners manual, conforms to the delivery voltage of your local power supply (i.e. 240V / 230V / 220V / 115V / 100V AC dependent on country).

#### General Warnings

Every piece of Consonance equipment is designed to produce the finest sound quality that can be achieved, by avoiding compromise wherever possible. This can lead to circumstances that may be unfamiliar to the equipment owner. The material that follows contains advice specifically related to Consonance equipment as well as more general warning about the use of domestic audio products.

#### Troubleshooting Guide

Equipment problem could also be caused by fault in any part of the system or its installation. As Legal consumer protection varies from country to country, you should always first consult the local dealer for any technical problems that you may experience. Please contact your local distributor or Opera Audio at the address in the back of this manual for any difficulties that cannot be resolved.

Certain Consonance equipment is made in special versions for different territories as a result it is impracticable to arrange international guarantees. Please establish appropriate guarantee arrangements with your own dealer at the time of sale. We are always available to offer help and advice. It is essential that repairs and updates are only carried out by authorized Consonance dealer or Opera Audio factory. As many Consonance components are custom made and specially matched, the replacement parts must be ordered through Opera Audio or its representative. Our dealer will have all relevant information about the service in your area and will ensure that you equipment is serviced without delay.

If for some reason, there are no service facilities available in your area, please ship the equipment to the address listed at the back of the manual.

Please note that you are responsible for all shipping charges, insurance, and re-importation to your country, and duty arrangements.

When shipping a product back to factory for service, always include the following:

- Sales slip or other proof of purchase if repair is claimed under warranty.
- A proforma invoice with value of the goods, stating that the amplifier is returned to china for repair.
- An accompanying letter describing faults, symptoms or problems with the amplifier.
- Always ship the amplifier in its original carton and packaging material to prevent damage in transit.

Opera Audio will not accept responsibility for any damage caused in transit, no matter whatever caused.

## **OPERATING TIPS**



From left to right :

Power switch , Display touch screen .

distal input and extent	
vigital induction analysis output	AC230V 50Hz T0.5A AC115V 60Hz T1A
ETHERNET USB digital output	
	CE model:reference7 music player made by opera audio

From left to right :

RJ-45 LAN interface, USB HOST jack , Digital output Phono/RCA, Digital input SPDIF(Phono/RCA) and OPTICAL , Analog outputs( Phono/RCA right/left,Balance,Vacuum output phono/RCA), Fuse AC Power connection 240V / 230V / 220V / 115V / 100V AC dependent on country.



After turning the player on and waiting 1 minute, the icon interface will show up as per the above picture, with five in total. Only three icons can be seen each time, they can me switched (moved) simply by touch or by remote control. For example, you can switch the icons from left to right by touching icon 1 and as a result, this icon will become larger and get centrally located; but if by touching icon 3, it will be switched from right to left. Change to each icon by touching it only once. As long as you touch icon 2 while it is in the center location, the player will begin the function that that icon indicates.

The icons of this interface indicate the following functions:

- 1. System settings list or view system properties
- 2. Enter the option menu of the player HDD or USB storage device.
- 3. Enter the source list of network sharing.
- 4. Enter the menu for selecting any available internet radio station.
- 5. Enter the favorites to select any personally saved songs or internet radio.
- 6. Into the DAC state, through the optical fiber, coaxial input for receiving external digital audio.

#### Note: coaxial and fiber-optic can not be used in the same time.



Enter the option menu of HDD or USB storage device by touching the icon, which includes the below functions:



Enter the file list of your USB storage device (USB flash disk or mobile HDD).

## **Player Interface**

When any stored file or any internet radio station is playing, the following interface will be available.



Each indicates the function as follows:

- 1. Record button: you can record the current playing file and store it in your hardisk by touching this button.
- 2. Previous button: Play back the previous file by touching this button.
- 3. Progress bar
- 4. Play/Pause
- 5. Next button: Select the next file to play by touching this button.
- 6. Stop and go back to the playing file /radio station list.
- 7. Return to the playing file /radio station list
- 8. Show the sampling rate of the current playing file.
- 9. Show the bit rate of the current playing file.
- 10. Displays the current track name of the file being played.
- 11. Display the play duration of the current playing file (or Beijing time for the internet radio).
- 12. Show the current playing programme status, which can be set by the remote <u>control</u>. The following 5 icons indicate the different playing status:

	Single repeat play
Â	all cycle play
$\mathbf{\hat{X}}$	non-repetitive play
$\succ$	random play
$\Rightarrow$	sequence play

Centralize the default external/mobile hard drive icon, this time directly touch the icon or press the remote control "confirm button" to go directly into the external hard disk file list. When you select a file, enter the track file list. At this time select a remote file and click the confirmation button, then enter the file playback interface.

If a USB mobile HDD is selected, the operation is the same as that of the local disk. For a storage device such us USB flash disk, please enter the file directly.





## System Settings

Select the icon in the main menu to enter into the System Settings, which includes the other six setting functions as follows except the above-mentioned Network Settings.

## **Backlight Brightness**

There are 4 levels of LCD brightness. Select the suitable level by touch screen or by remote control, with the forth level as the brightest.

## Language Selection

Simplified Chinese, traditional Chinese, English and German are optional for different countries and regions.

## **Backlight Duration**

The Backlight Duration:5,10,30 seconds or constant light are optional.

## **Firmware Update**

The system can get updated through Firmware Updates. You just need to save the update firmware in a USB flash disk and then insert the USB flash disk into USB HOST port. Then select Firm Update by touch screen or pressing the remote control to start updating. Do not pull out the USB flash disk during updating until the screen displays" The update is done". The update is completed before the system automatically restarts.

## **Touch Screen Calibration**

To ensure the touch screen sensitivity, please select Touch Screen Calibration prior to initial use or when you want to change this sensitivity setting. The screen will display one "+" in the calibration interface, you then need to touch this icon, the "+" will jump to a corner and then the next one will jump to another corner and finally go back to the center.

The Reference 7 has one RCA standard SPDIF (Digital signal level is 0.5Vpp when terminated in 75 ohm load )and one AES Digital signal level that is 3Vpp when terminated in 110 ohm load )digital audio outputs. This is the standard load impedance of external DAC's and other recording equipment.

## **Network Settings Help**

The machine has been enabled by default DHCP in the factory, if you can not connect to the network IP address it can be set manually to connect to the network.

## **WI-FI and LAN connections**

Plug the WI-FI module into the USB HOST interface, then connect your home computer's network cable directly into the "LAN" port and set up the relevant network configuration to use the machine's networking capabilities. Note: After inserting the WI-FI module, you must restart the unit, and select the wireless mode; when using the home computer network cable directly into the LAN port, remember to choose the cable mode.

Then return to the main menu interface and touch the screen or click the confirmation



button on the remote control to set options, Then enter the set list of items. A total of seven topics: "Network Select" "the backlight brightness", "Select" "the backlight time," "Firmware Update" "touch screen calibration" and "System Properties." Select "Internet options" to enter the network settings item list: "Wireless Settings" "IP Settings" "DHCP" "Network Type." Select the "Network Type" if you are using a network cable, if connected via WI-FI, select Wireless. If connect via WI-FI you will have to enter the "wireless settings"

and set the connection password(use remote A, V and  $\neg$ ,  $\blacktriangleright$ ).Depending on the type of network you use, you must enter "DHCP" and select Open, or to enter "IP Setting" and enter the IP address and DNS server address setting. When you select Open network, the DHCP can not connect via an IP address, you must manually connect to the network by using the remote control number keypad to enter an IP address. For Network set up, go into the main menu interface, select the network resource list, select the file you want to play, then enter the file playback interface.

## **Network Guide**

For those with basic network set-up knowledge this should take less than 10 minutes and should only need to be done once or everytime you change your router or it's configuration. We suggest you use a high quality wireless router for hi-res audio playback. Bargain routers may give you problems.

We are running Windows 7, if you are please upgrade your REFERENCE 7 Operating System from

the Opera web site, www.opera-consonance.com if you have an earlier model, in the setup menu you will find which OS you have installed. You should check every few weeks to see if a new OS version is out, new features and fixes are being addressed on an ongoing basis.

Many setup or connecting operations in the REFERENCE 7 can take up to 10 seconds to succeed or

fail, please wait for this 10 seconds, do not keep pushing buttons or it can lock up the OS and you will need to reboot the REFERENCE 7.

On your computer, log into your Network Router, typically by typing http://192.168.0.1 or http://192.168.0.1 into your browser, if you installed your wirless router with standard setting, if you installed your router with custom settings, you likely already have the D-7

setup :). We have all seen the 'contact your network administrator' messages before, if you can't find or log into your router, guess what :) We can't help you with that.

Once logged in find your Network Settings menu, this will be different on every router's interface, we will show you ours as a guidline.

a. Here you see the Router IP Address, we will need that. In my case it is 192.168.0.1



b. Here you see the IP Address Range, we will need that. In my case it is 192.168.0.100 to 192.168.0.199

() 192.168.0.1/lan.asp	
💷 GF 🦳 Servers 🗋 Trans 🦳 Audio info 🗋 Goes 🦳 Site 🧮	) Radio 🦳 new stuff 🦳 reviews 🦳 Old98 🦳 vinyl 🦳 store 🦳 News 📋
DHCP SERVER S	SETTINGS
on your network.	configure die builden brief beiver to assign te autresses to the compaters
Enable D	HCP Server: 🔽
DHCP IP Add	Iress Range: 192.168.0.100 to 192.168.0.199
DHCP	Lease Time : 10080 (minutes)
Alway	s Broadcast : 🗹 (compatibility for some DHCP Clients)
NetBIOS ann	ouncement:
Learn NetBIOS	S from WAN : ]
NetBIOS	BIOS Scope : (Optional)
	Point-to-Point (no broadcast)
	Mixed-mode (Broadcast then Point-to-Point)
Primary WINS	IP Address :
Secondary WINS	IP Address :
ADD/EDIT DHC	P RESERVATION
	Enable : 🗖
Com	puter Name : << Computer Name 💌
	IP Address :
M	AC Address :
	Copy Your PC's MAC Address
	Save Clear
	TIONS LIST ·

*c.* Here you see the assigned IP Address already assigned on your network router, we will need that. *In my case you see Rachel's and my computer's IP address, what you see will depend on your network devices, you will also see the D-7 hooked up to 192.168.0.101, the iRadio name. You won't see the yet on yours, but soon will, we hope :).* 

192.168.0.1/lan.asp	
GF 🗀 Servers 🗋 Trans 🦳 Audio infi	🕒 Goes 🦳 Site 🦳 Radio 🦳 new stuff 🎦 reviews 🎦 Old98 🦳 vinyl 🦳 store 🦳 News 🗍
▶	NetBIOS node type :
	ADD/EDIT DHCP RESERVATION
	Enable : Computer Name : IP Address : MAC Address : Copy Your PC's MAC Address Save Clear DHCP RESERVATIONS LIST :
	Enable Host Name MAC Address IP Address
	NUMBER OF DYNAMIC DHCP CLIENTS : 3
	Hardware Address Assigned IP Hostname Expires
	00:1b:24:85:57:3e 192.168.0.102 Rachel-PC Mon Oct 12 21:57:32 Revoke Reserve
	00:0b:6b:e7:8b:00 192.168.0.100 iGrant-PC Tue Oct 13 12:44:59 Revoke Reserve
	00:0a:eb:aa:43:50 192.168.0.101 RadioAA4350 Tue Oct 13 13:16:43 Revoke Reserve 2009
WIRELESS	

d. From your Windows Start Menu get your command prompt screen and run the

command ipconfig/all. Here you will find your Router's DNS address, we will need that, *in my case it is 192.168.0.1* 

Command Prompt \_ 8 × Microsoft Windows [Version 6.1.7600] Copyright (c) 2009 Microsoft Corporation. All rights reserved. C:\Users\iGrant>ipconfig/all Windows IP Configuration Host Name . Primary Dns Suffix iGrant-PC Hybrid Node Type No No F WINS Proxy Enabled DNS Suffix Search List. cg.shawcable.net н Wireless LAN adapter Wireless Network Connection: cg.shawcable.net Atheros AR5B93 Wireless Network Adapter 00-0B-6B-E7-8B-00 Connection-specific DNS Suffix Description . . . Physical Address. DHCP Enabled. . . H Yes Autoconfiguration Enabled Link-local IPv6 Address Yes E fe80::fd88:f51d:7725:2a44%12(Preferred) 192.168.0.100(Preferred) 255.255.255.0 Thursday, February 10, 201: Thursday, February 17, 201: fe80::226:5aff:fefa:292×12 IPv4 Address. Subnet Mask . . Lease Obtained. Lease Expires . Default Gateway 2011 2011 9:58:21 AM 9:58:21 AM 192.168.0.1 DHCP Server DNS Servers 168 С NetBIOS over Topip. Enabled Ethernet adapter Local Area Connection:

#### Set up the Reference 7's LAN network.

1.Power down. We assume you have everything hooked up for hearing the D-7 thru your system and have played some files from a USB or Flash Drive and have read the manual and have familiarized yourself with the user interface. We find the remote is quicker to use than the touch screen for these steps.

2. Hook up Ethernet Cable from your router to the D-7 for LAN operation. If you have the optional wireless dongle, insert into one of the two USB hosts (front or rear, your choice), you first need to setup the D-7 network connection by LAN even if you only intend to use the wireless dongle.

Network

Brightness

Language

Screen Time

3. Power up.

4. Menu select Setup / Network / NetType, Set to Lan, might take up to 10 seconds for checkmark to appear beside LAN, hit 'go back' button on remote or screen..

	IP Set		Lan	<b>~</b>
			Wireless	
$\checkmark$	💮 Wi-fi Set		ОНСР	
elect [	DHCP and set to Off, go	back.		
			ON	
			OFF	

DHCP is not fully implemented yet, might work on your network, doesn't on mine.

6. Select IP Set/Route Addr. Enter your Router Address from 'a' above, *in my case it is 192.168.000.001*. Press Enter, you should get a 'set succesful' screen for a few seconds and then return to the previous menu.

Note - whenever you you have a number to input in the D-7 leading zeros are redundant, 192.168.0.1 = 192.168.000.001 in the D-7, this is typical for most network devices.



7. Select Dns Addr. Enter your DNS Address from 'd' above, *in my case it is 192.168.000.001*. Press Enter, you should get a 'set succesful' screen for a few seconds and then return to the previous menu.

💿 IP Set			💿 Dns Addr
~	IP Addr		
	Route Addr		400 400 000 004
	Dns Addr		192.168.000.001
		Ċ	Ċ

8. Select IP Addr. Enter a Free Address from 'b' above, *in my case it is 192.168.000.101*. Press Enter, you should get a 'set succesful' screen for a few seconds and then return to the previous menu.

IP	Set	🚳 IP Addr
	IP Addr	
	Route Addr	
	Dns Addr	

9. Refresh you Router Admin panel in your browser, you should now see that 'iRadio....'

has been assigned the IP you enetered. If your router assigned a different number than 192.168.0.1/lan.asp

y .	NetBIOS Primary WINS	node type : IP Address : IP Address :	Broadcast or Point-to-Poin Mixed-mode Hybrid (Poin	nly (use when no WINS se nt (no broadcast) (Broadcast then Point-to- t-to-Point then Broadcast)	ervers conf -Point) )	îgured)
	ADD/EDIT DHCP	RESERVATI	ON			
	Comp 1 MA	IP Address :	Copy Your PC's	<< Computer Nar	me 💌	
			Save Cle	ar		
	DHCP RESERVAT	TIONS LIST :	Save Cle	ar ess IP Addr	ess	
	DHCP RESERVAT Enable Host	TIONS LIST : Name	Save Cle	ess IP Addr	ess	
	DHCP RESERVAT Enable Host NUMBER OF DYN Hardware Address	TIONS LIST : Name AMIC DHCP Assigned IP	Save Cle MAC Addro CLIENTS : 3 Hostname	ess IP Addr Expires	ess	
	DHCP RESERVAT Enable Host NUMBER OF DYN Hardware Address 00:1b:24:85:57:3e	TIONS LIST : Name AMIC DHCP Assigned IP 192.168.0.102	Save Clever MAC Addree CLIENTS : 3 Hostname Rachel-PC	ess IP Addr Expires Mon Oct 12 21:57:32 2009	ess <u>Revoke</u>	Reserve
	DHCP RESERVAT Enable Host NUMBER OF DYN Hardware Address 00:1b:24:85:57:3e 00:0b:6b:e7:8b:00	AMIC DHCP Assigned IP 192.168.0.102	Save Cle MAC Addre CLIENTS : 3 Hostname Rachel-PC iGrant-PC	ess IP Addr Expires Mon Oct 12 21:57:32 2009 Tue Oct 13 12:44:59 2009	ess <u>Revoke</u> <u>Revoke</u>	Reserve

you entered, re-enter this number into '8' above.

10. Go back to the main menu and navigate to Internet Radio and select 'Area Catalog' to see if you are properly connected. It should only take a few seconds for countires to list, if it reverts back to the previous screen then something isn't setup right. Reboot and try the Internet Radio again, if still not working, then repeat the instructions so far again and check that all inout addresses are correct, if still not working it is time for the dreaded 'contact your network administrator' which is not us:)

🚔 iRadio	
Area Categ	Internet Radio
	Connecting
Categories	Exit

If 10 is succesful, it is time to connect the D-7 to your computer. You will need to set up

sharing to the folder(s) and/or hard drive(s) on your computer. Instructions for this will be found in your computer's OS help files.

11. Navigate to Net Source/ Samba Sh.../Input IP (UPNP Share not fully implemented yet for all OS's, but works fine with Windows 7 in our setup). Input the IP of the computer you set up for sharing files, see 'c' above for the IP address. In my case it is 192.168.000.100, hit enter and you will see a connecting screen, then in a few seconds you should see the folders and/or drives that you set for sharing. Navigate to the music you want to hear. Note that if a folder has a large number of files, it can take up to 30 seconds to scan all the files to get the titles. I use folders to minimize this.



## Set up Wireless Network

If all is good above then it is time to set up the wireless network, assuming you have the optional wireless dongle from GF or Opera. We suggest only using the ones we provide, with all the different types out there, odds are they may not work.

In our example we are using WEP Shared encryption, this works well with the D-Linear 7 and our router, you results may vary, if not connecting or not working right, try different connection or encryption method, as a last resort you can disable encryption for trouble shooting, then work on your security method that allows the D-7 to integrate with your network. If you end up changing your router settings, make sure you set your other network clients up to the new settings.

12. Navigate back to Setup/Network/NetType

💿 N	etType	
16		
	Lan	
	\\/irolocc	

13. Select Wi-Fi Set, click 'enter' on the Auto Search screen or remote, you will see 'Searching' and then a list of networks you can hook up to. Select the relevant network, if you are using a password protected and encrypted router, select the type of key if prompted or enter the network password if only that screen appears. You will see connecting, if all is good, the next screen will say Wi-Fi IP Added, you are done go back to the top menu.

If not successful at any point above, you will get a screen that says password error or it will stay in the same connecting screen, if not connected or moved onto the next screen within 10 seconds, go back and try a different IP Address, see '8' above, then repeat instruction '13', if still doesn't add the Wi-Fi IP Address or move to the next screen then try a different encryption method on your network router until you find one that works. If encryption fails to connect, you can disable encryption to see if it works fine and then troubleshoot from there. Note that by disabling encryption on your router your network will open to everyone, not suggested to leave in this state.

If you get the Wi-Fi Scan Failed screen, then there is something wrong with with the wireless adapter and your router, you will not be able to use wireless until it is sorted.





14. Repeat 10 and 11 above to confirm your wireless is working fine.

15. Write down your settings in case your network changes or the D-7 loses it's settings You should be all set up now, reboot the D-7 and test both wired and wireless operation. If all good then see how extremely cool the UPNP is for doing playlists, or sorting by styles etc from your library.

Remember that to do 192k/24 bit files, you need to be running wired from your computer to the router and from your router to the D-Linear 7. Once you introduce wireless then you are limited to 96k/24 bit files. No matter which enjoy your basically jitter free high end high resolution audio playback.

## Play the files shared over network

To achieve a network share, first of all make sure all music files in PC disk files or folders is



## Play internet radio

For playing Internet radio stations you must have set up the network first, then select the main menu interface, enter the station list: "Area classification", "type category." By region of Africa, the Americas, Asia, Europe, Middle East, Oceania, and the country or region, and finally the station name list. Sub-stations are divided according to types, such as region or musical category. Choices can be based on their own path, select the desired station and entered the broadcast interface. You can use the numeric keypad on the remote control to select stations, in the station list interface, press the remote control number keys to enter a number, this number will list the corresponding radio station name on the left of each number, then you can easily choose the desired station.

## ADD

## Quick Play FAV

ADD

Select your favorite file in the file list or radio station in the internet radio and then click FAV Add to Favorites ,choose their suitable file type and then press "Ok" key to finish. After that, you can play the file or radio station in the Favorites just by selecting it. You can create one play list through the function of Quick Play and you simply just need to select from this list to play next time.



Hold down the icon for about 2 seconds or press the seconds to start recording from the internet radio. The recorded file will be automatically named and saved in your external hard disk(FAT32 format can only be recorded on the hard disk or U disk). The recording will stop after pressing the Record key again.

## **Descriptions for each USB port**

The machine also has two rear panel USB HOST USB DEVICE Interface ports.

## WARNING Note: Do not run all two USB ports at the same time, this can cause a USB failure.

## **REMOTE CONTROL**

The remote control uses two 1.5-volt LR03 AAA batteries.

Standby :After powered on, the remote control will go into standby status until powered off. It will take 3 seconds to power off by pressing this key.

## WARNING: During playback of USB mobile HDD files, be sure to touch the icon

of the touchscreen interface or key on the remote control to stop and exit to go into standby status, otherwise it is possible to damage the HDD. Start the system as long as you press the Standby key.

**Record**: Press this key to record any radio station high quality audio broadcast, the recorded file is automatically named and saved in the mobile storage device.

# Play/Pause

EXIT Back: Return to the previous menu or list operation.

**TIME** Timing mode: Timing mode choice, order, or reverse.

**FUN Functional key:**Press this button for pop-up copy, paste, cut or delete files menu.While the player in playing,to select digital de-emphasis. D0 pass, D1 opening.





**W** Internet radio: In the main menu interface, press this key and go directly to the list of Internet radio stations.

**SWIT CH Play function switch:**Block play, press this button to switch tracks, all repeat, no repeat, sequence playback or random playback mode. ADD

FAV Add/Open Favorites: Press this key to save a currently playing file or Internet radio station to your favorites for later playback directly.

**OK** Ok Serves as an enter key for system settings, operation or file selections.

**Up**: Increases the volume per touch, or hold down to make the volume gain continuously. As a file list search function key, press the button up to select a file, press and continue until you reach the desired track.

**Down**: Reduces the volume per touch, or hold down to decrease the volume continuously. As a file list search function key, press the key down to select a file, press and continue until you reach the desired track.

**Prev:** Pressing this key returns you to the previous file or radio broadcast.



**Next:** Pressing this key will take you to the next file or radio broadcast.

Stop: Press this key will stop.

## RCLL

**LIST Go Play interface :** Pressing this key can return you to main interface that is currently being broadcast.

**DAC** Digital filter response: Press the button from to select digital filter response of the five kinds of effects.

## **TECHNICAL SPECIFICATIONS**

- Digital music player(24 Bit/192KHz WAVE/FLAC))
- High-performance independent D/A converter(24 Bit/192 KHz)
- Digital stream Hard Disk recorder( 24 Bit/ 96KHz)
- WI-FI / LAN Internet radio
- Support cable network: Ethernet cable network 10/100Mbps, RJ-45 interface;
- Support wireless network: IEEE 802.11 b/g with a maximum transmission speed of 54Mbps;
- 5.0 inch TFT true-color touch screen operation;
- Support TCP/IP, UPnP, UDP, RTSP, DHCP, PPPoE and HTTP network protocols and media sharing between NAS (Network Attached Storage) and PC;
- Support MMS, RTSP and HTTP stream media protocols;
- More than ten thousand radio channels from all over the world are built internally and you can hear anywhere of the world;
- Support two USB2.0 HOST;
- Advanced IR remote-control;
- Supports the decoding of various main stream digital audio formats, including WAV, AIFF, AAC and FLAC etc;

DAC resolution	24bit 192KHz multilevel sigma-delta with Asynchronous upsampling
0dBFS signal output	2.3V RMS (RCA,XLR)
Output Terminals	Gold plated Tube RCA unbalanced and gold plated XLR balanced
Frequency response	Less than +/- 0.1 dB deviation 20Hz-40kHz
Signal-to-noise ratio	More than 110dB (RCA/ XLR output)
Signal-to-noise ratio	More than 100dB (Vacuum tube RCA output)
Distortion (XLR)	Less than 0.0025%
Distortion (RCA)	Less than 0.003%,0.03% (Vacuum output)
Vacuum tube	Sovtek 6H30 x1
Digital output signal level	0.5Vpp (RCA)
Digital output impedance	75ohm (RCA )
Digital outputs	Gold plated RCA
Digital inputs	2 USB HOST, 1 LAN, 1 Coaxial, 1 Optical
Dimensions	11cm x 43cm x 33cm (HxWxD)
Weight	16kg(wood top panel) / 18kg(Metal top panel)

## Warranty

Opera audio guarantees each product manufactured by us to be free from defects in materials and workmanship under normal use. Our obligation under this warranty is limited to making good at our factory any part or parts thereof which shall, within 1 year after delivery to the original purchaser, be returned to us with transportation charges prepaid, and which an examination shall disclose to have been thus defective; this warranty being expressly in lieu of all other warranties expressed or implied and of all other obligations or

liabilities on our part. This warranty shall not apply to any Opera audio product which shall have been repaired or altered outside of our factory in any way so as to affect its stability, nor which has been subject to misuse, negligence or accident. Warranties of the vacuum tubes are by the respective manufacturers, usually 90 days.

#### Please mail or e-mail the Registration Card to the address as follows:

#### The Opera Audio Co., Ltd.

No.2 JiuXianQiaoLu ChaoYang District Beijing, China Tel: 86 10 59789461 Fax: 86 10 59789265 support@opera-consonance.com http://www.opera-consonance.com



## **Registration Card**

Name Address			
City State Zip Email Telephone Model Serial Number Purchase Date Dealer			