

# Reference8 Pro 25<sup>th</sup> Anniversary music player

## USER MANUAL

### ENGLISH

#### INTRODUCTION

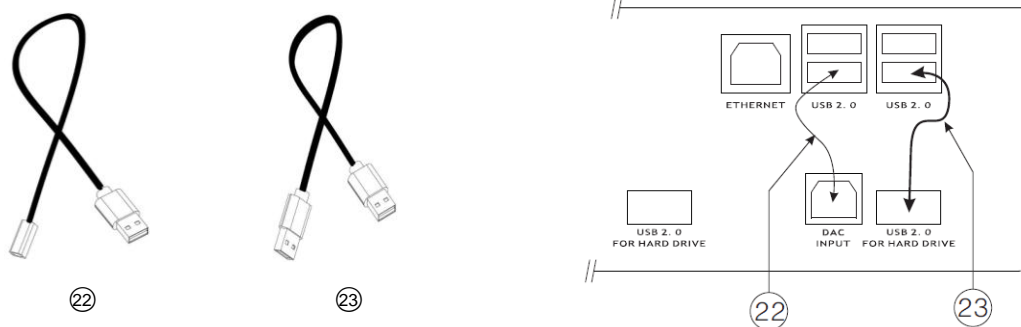
Congratulations on your purchase! Consonance Ref 8 Pro 25<sup>th</sup> Anniversary is an integrated Music Network Player and Streamer designed with 3 key principles in mind: ease of use, universal compatibility with music sources and sound quality. To achieve its best potential, please read this manual carefully. If needed, our support team is there to assist for any doubt or question regarding our products at [operaamp@vip.163.com](mailto:operaamp@vip.163.com)

#### QUICK START GUIDE

Ref 8 Pro 25<sup>th</sup> Anniversary is a ready to play device. From Unboxing, the unit is ready to play in less than 5 minutes.

In order to get started please follow those steps:

Step 1: Unbox your Ref 8 Pro 25<sup>th</sup> Anniversary



Pic.1

Step 2: Insert the supplied USB cables (22 and 23) into the corresponding interface as shown in the figure before turning it on. If you use the stream part of Ref 8 Pro 25<sup>th</sup> Anniversary alone to connect to other DAC or use the decoding part of Ref 8 Pro 25<sup>th</sup> Anniversary alone, unplug the 22 USB cable. Connect your Audio system via RCA or XLR.

Step 3: Screw the included Wireless and Bluetooth Antenna.

Step 4: Plug power cable.

Step 5: Wait 3 minutes for Ref 8 Pro 25<sup>th</sup> Anniversary to do first start initialization.

Step 6: Connect to the wireless Hotspot network called Opera (password 12345678).

Step 7: Complete the first setup wizard.

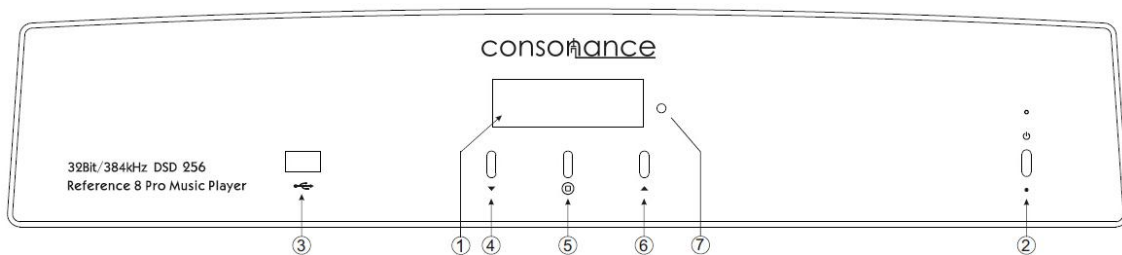
Step 8: Done.

## WHAT IT'S IN THE PACKAGE

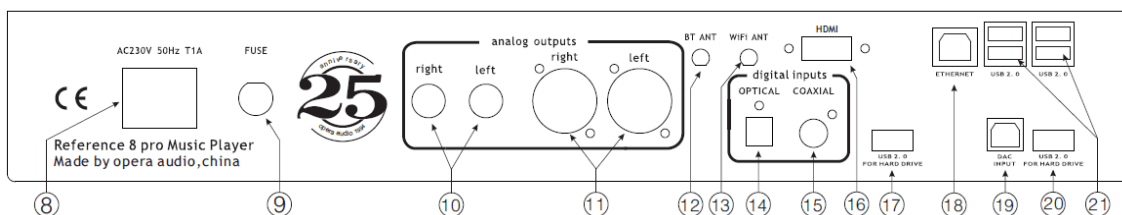
- Ref 8 Pro 25<sup>th</sup> Anniversary
- Wireless and Bluetooth Antenna
- USB cable for Hub and USB cable for DAC
- Remote control
- Power cable
- User Manual

## IO OVERVIEW

### 1/2 Front



- ① **Display:** All information used to display the decoded portion.
- ② **Power Switch**
- ③ **USB2.0 for Memory:** Those ports can be used to attach USB Accessories such as Thumb Drives, USB Hard Drives and SSD.
- ④ **Down Button:** Settings for decoding some functions.
- ⑤ **Menu Button:** Switching between the mode and setting menu for decoding part.
- ⑥ **Up Button:** Settings for decoding some functions.
- ⑦ **IR Window**



- ⑧ **Power Socket**
- ⑨ **Fuse**
- ⑩ **Unbalanced Analog Outputs**
- ⑪ **Balanced Analog Outputs**
- ⑫ **Bluetooth Antenna:** Bluetooth name “consonance”.
- ⑬ **WiFi Antenna:** To ensure optimal Wireless performances, screw the provided wireless Antenna. Please note that Wireless connection performances might not be optimal for Streaming Hi Resolution Audio, especially if Router is not located near the Ref 8 Pro 25<sup>th</sup> Anniversary or if operated in a very crowded neighbourhood.

- ⑭ **Optical Digital input**
- ⑮ **Coaxial Digital input**
- ⑯ **HDMI Output:** This output allows to connect a TV or monitor and it will display the User Interface. It can be used as an alternative to the small screen of a mobile device. In order to control the unit, the attached screen must be a touchscreen, unless a mouse and/or keyboard is connected.
- ⑰ **USB2.0 for Hard Driver:** This port can be used to connect USB accessories that require high current, such as USB hard drives and SSDs.
- ⑱ **GIGABIT NETWORK: Wired Network interface. This is the suggested network** connection for playing Hi-Resolution material. Connect this interface to your router via an Ethernet cable.
- ⑲ **USB DAC Input:** The decoding part of Ref 8 Pro 25<sup>th</sup> Anniversary can be used separately, this port can be connected to a computer or other digital interface.
- ⑳ **USB2.0 HUB Input:** When using 17 port, please use connect this port to other usb2.0 ports.
- ㉑ **USB2.0:** Those ports can be used to attach USB Accessories such as Thumb Drives, Keyboard\Mouse, Smart Remotes and USB CD-ROM Drives. Additionally, USB DAC can be used as output audio device if connected to one of the 4 available USB ports.

## CONNECTION TO THE UNIT

Ref 8 Pro 25<sup>th</sup> Anniversary works best when it is connected to your network, since it is meant to be used as a headless device: no monitor connected, and controlled via another device (PC, smartphone, tablet etc). It is the easiest way to connect your router to your network with a network cable. No setup is required.

Another easy way to connect to Ref 8 Pro 25<sup>th</sup> Anniversary, especially on first setup, is to connect in Hotspot Mode. If no wireless network is configured, Ref 8 Pro 25<sup>th</sup> Anniversary will create a network called "Opera". Simply connect to it (password:12345678) and the User Interface will automatically pop up.

Ref 8 Pro 25<sup>th</sup> Anniversary can be controlled via a Web User Interface, it means that the controlling device can be a mobile phone, a tablet, a PC, a Smart TV and more generally, anything with a browser. For an optimal experience, Google Chrome is suggested.


To reach Opera\_consonance's User Interface, first discover the IP address of your Ref 8 Pro 25<sup>th</sup> Anniversary. To do so, an easy way is to use FING Android App or Net Analyzer for iOS.

Opera also provides Android apps. It will automatically discover the Ref 8 Pro 25<sup>th</sup> Anniversary on your Network.

Apple system opens Safari browser, enter opera.local/, PC recommends using Google Chrome, enter opera/ to enter web-UI.

## FIRST SETUP

Once the system is operational and you have connected to it through your network or via the hotspot, you will reach Opera's web-UI.

The first time please click on the cog-wheel  in the top right part of the UI, select system and click on "Run first config Wizard", a helper will assist you to configure Ref 8 Pro 25<sup>th</sup> Anniversary. Any configuration done in this phase can be later reverted.

Those are the first configuration steps:

**LANGUAGE:** Select your desired operational language.

**NAME:** Give your Ref 8 Pro 25<sup>th</sup> Anniversary a unique name like "Living Room", "Studio" etc. This will be useful to identify your Ref 8 Pro 25<sup>th</sup> Anniversary in case you have more than one. The default name is "Opera".

**OUTPUT:** Select the desired audio output: OPERAAUDIO USB Audio.

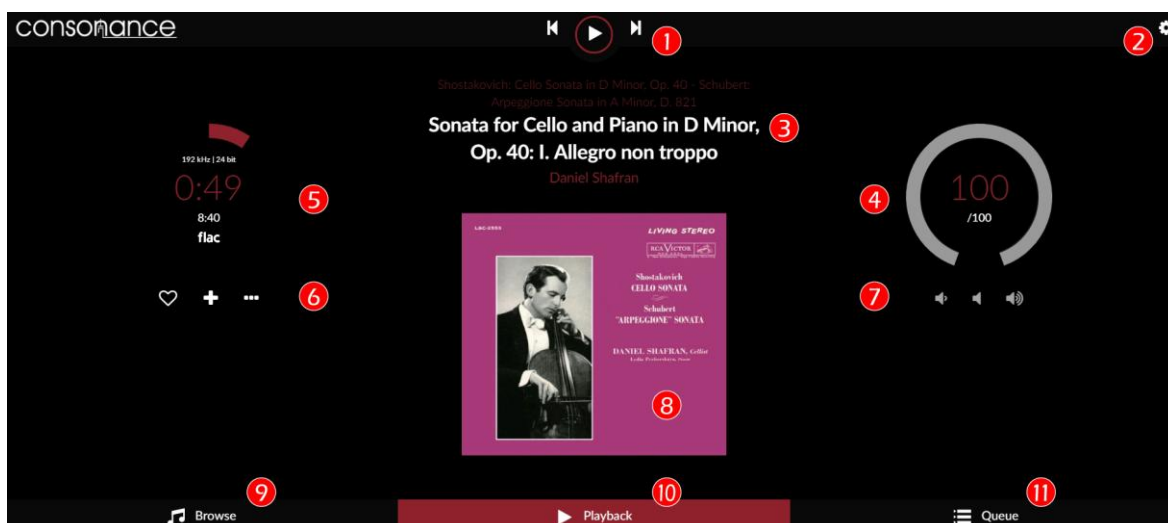
**NETWORK:** If you wish to configure your Ref 8 Pro 25<sup>th</sup> Anniversary to connect to your Wireless Network, here you will be able to see all available wireless network and connect to them. In case of Hotspot operation, Ref 8 Pro 25<sup>th</sup> Anniversary will connect to the wireless network after the Setup Wizard has been terminated. In this case, you must find it's IP address again (see Connection to the Unit section).

**MUSIC:** You can configure a Network Attached Storage for music retrieval or connect a USB Drive with your music.





Once the first setup has been completed, your Ref 8 Pro 25<sup>th</sup> Anniversary is ready.

## FIRST STEPS WITH OPERA

Depending on the device used to connect to Ref 8 Pro 25<sup>th</sup> Anniversary, a desktop or mobile version of the User Interface is shown. Both provide same features, but ergonomic is different to best fit with the use (mobile or desktop).



Opera\_consonance's User Interface is made up by 4 main components:

-  Playback Page tab
-  Browser Page tab
-  Play Queue tab
-  Settings pages

### 1 - Command buttons

Play/Stop

Previous : jump to previous track

Next : jump to next track

### 2 - Settings gears

Here you'll find all settings for Ref 8 Pro 25<sup>th</sup> Anniversary such as :

**My Music:** Music sources (nas, usb and album art management)

**Playback options:** Output device settings (dac, mixer, resampling)

**Network :** Set your wifi, ethernet, dns

**System :** To select your language, Name your device, Run first config Wizard, have version number and update if available, and see credits

### 3 - Track text information

First line: Album name

Second line: Track title

Third line: Artist name

### 4 - Volume Settings

Inside value: Current volume level

External circle: Graphic volume level.

Change the volume by moving it.

### 5 - Timer zone

Miscellaneous info about the played track

First line: Sample rate / bit resolution

Second line: Elapsed time

Third line: Total duration

Fourth line: Track source

### 6 - Track management

Left: Add to favorite

Middle: Add to playlist

Right: Go to - Artist/Album – Twitter

### 7 - Volume control

Left: Lower volume

Middle: Mute

Right: Higher volume

### 8 - Album art Display

Display album art for the played track or radio if available.

### 9 - Browse page

Clicking here, you access to all available music on your system (Nas, Usb disk, radio, Spotify, Youtube etc depending on plugins/options installed).

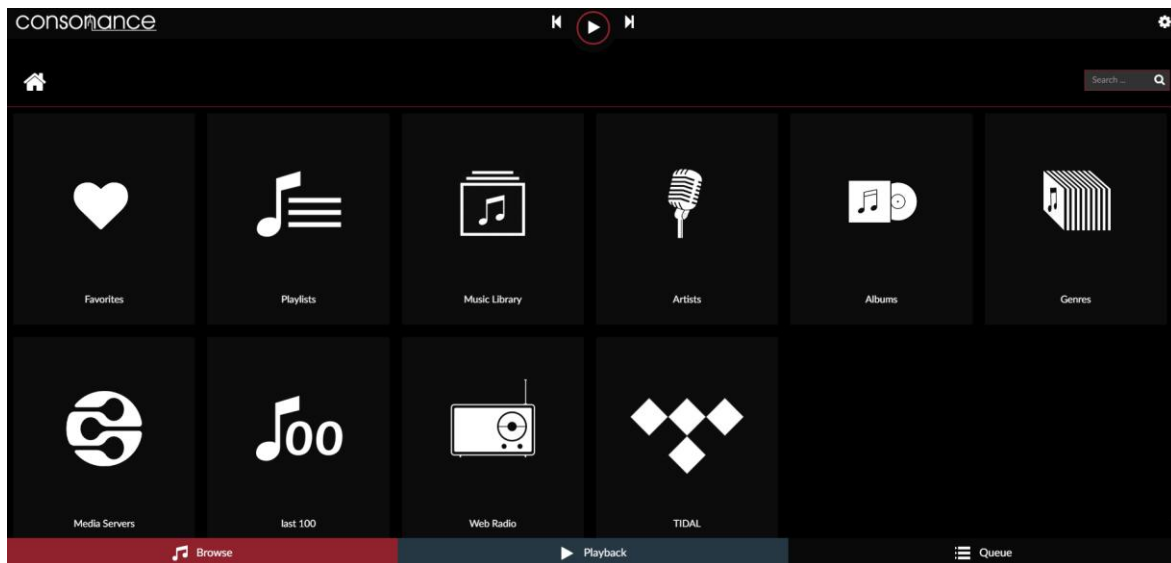
### 10- Playback

The current page

### 11 - Queue

Here you access to the current queue with all tracks in it.

## BROWSE PAGE



Clicking on Browse tab will allow to access all available music sources on your system.

### 1 – Favorites

Access your favorites tracks

### 2 – Playlists

Access your Playlists

### 3 - Music Library

Access your library in files/folder mode

### 4 – Artists

Access your library by artist

### 5 – Albums

Access your library by Albums

### 6 – Genres

Access your library by genres

### 7 - Media server

Access your media server if any

### 8 - Last 100

List the last 100 tracks played

### 9 – Web Radios

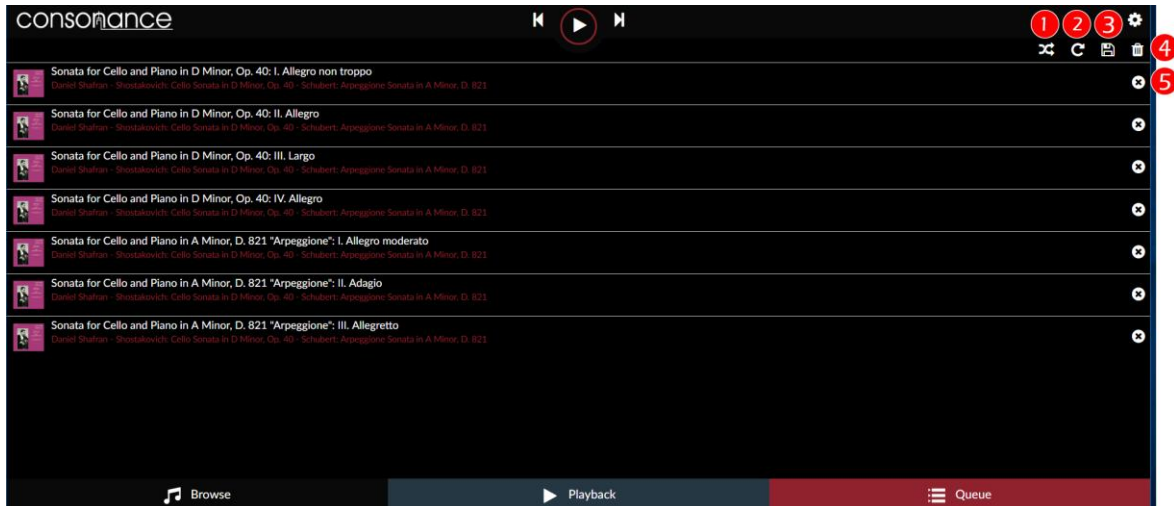
Access web radios.

To add your personal webradios, click on the 3 dots in "My Web Radios". Then fill the fields with the Radio Name and Radio Stream and click add.

### 10 – Other

Depending on plugins/options you have installed, you may have other tab such Spotify, Qobuz...

## QUEUE PAGE



Clicking on Queue tab will allow to access to the queue of the tracks that are going to be played.

### 1 – Random

Randomize the order tracks are played

### 2 Repeat

Repeat the track

### 3 Save

Save the current queue as a playlist. A name is asked for this Playlist

### 4 Clear queue

Clear the current queue

### 5 Remove track

Remove track from the queue

## More features

You can change the order of each track by clicking and moving it up or down.




## SOFTWARE UPDATES

Ref 8 Pro 25<sup>th</sup> Anniversary features an OTA (Over The Air) updater, meant to allow seamless and reliable way to update to new system versions. It's strongly suggested to check for updates periodically to ensure that your system is always at the latest version.

How to check for Updates

- Verify that your Ref 8 Pro 25<sup>th</sup> Anniversary is connected to the Internet
- Click on the cog-wheel in the top right part of the UI
- Select system
- Click on "Check Updates"
- If an update is available, you'll be presented with the new features
- Click on "Update Now"
- System update will start, and depending on the update size it might take up to 20 minutes
- Once Update has finished, you'll be asked to reboot. Do it
- The system will now restart, and the new version will be applied
- **IMPORTANT:** Do not remove power in this phase, as it might damage the unit

## THE FUNCTION OF REMOTE CONTROL OR ON THE FRONT PANEL BUTTONS

1. Digital inputs selections: Press the  on the panel or use the left and right arrows buttons on the remote control, it can choose the digital channel. They are Stream, Coaxial, Optical and Bluetooth.
2. Press the  on the panel for 2 seconds or the menu button on the remote control. Ref 8 Pro 25<sup>th</sup> Anniversary go into the digital filter Settings.
3. Continue to press , it can choose four Settings: PCM DIGITAL FILTER, DSD CUT OFF FILTER, OUTPUT PHASE and SOUND MODE. Press and on the remote or panel select what you want.

## FIVE SELECTIONS OF PCM DIGITAL FILTER



- PCM DIGITAL FILTER -  
1 Short delay Sharp  
roll-off



- PCM DIGITAL FILTER -  
2 Short delay Slow  
roll-off



- PCM DIGITAL FILTER -  
3 Sharp roll-off

- PCM DIGITAL FILTER -  
4 Slow roll-off

- PCM DIGITAL FILTER -  
5 Super Slow roll-off

- PCM DIGITAL FILTER -  
6 Low-dispersion  
Shot delay

#### TWO SELECTIONS OF DSD CUT OFF FILTER

- DSD CUT OFF FILTER -  
150KHz

- DSD CUT OFF FILTER -  
50KHz

#### DSD MODE

- DSD MODE -  
DSD Direct OFF

- DSD MODE -  
DSD Direct ON

#### SELECTIONS OF SOUND MODE

- SOUND MODE -  
MODE1

- SOUND MODE -  
MODE3

- SOUND MODE -  
MODE2

When Ref 8 Pro 25<sup>th</sup> Anniversary play the music, the “up” and “down” buttons will adjust the volume of the analog outputs.

## SPECIFICATIONS

**USB output:** 4X USB 2.0, PCM 32 bits 768kHz

**CPU:** Quad core 1.8 GHz ARM Cortex-A17 with passive heatsink

**RAM:** 2GB

**Internal Memory:** 16GB Emmc

**Video Output:** HDMI, up to 4K resolution

**LAN:** Gigabit

**Wireless Networking:** 802.11 b/g/n Wi-Fi & Bluetooth 4.0 + EDR with External Antenna

**Supported audio file formats:**

DSD: DSF (DSD), DIFF (DSD)

PCM: FLAC, Apple Lossless (ALAC), WAV, AIFF, APE, MP3, AAC

**Supported audio sample rates, bit depths, number of channels:**

PCM, 44.1kHz-384kHz, 16-32bit, Stereo

DSD, 2.8MHz-11.2MHz, 1bit, Stereo

**Digital inputs:** USB2.0, Coaxial, Optical, Bluetooth (Name: consonance)

**Digital output:** USB2.0

**Analog output:**

unbalanced: 2.4V RMS, Distortion: <0.003%

Balanced: 4.8V RMS, Distortion: <0.0025%

**Dimensions:** 14cm×44cm×33cm (H×W×D)

**Weight:** 8.9kg (wooden top cover) 12.9kg (aluminium top cover)

\* Specifications subject to change without notice.

## 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 Jiuxianqiao Road,  
Chaoyang District, Beijing, China

Tel: 86 10 59789215

Fax: 86 10 59789265

[support@opera-consonance.com](mailto:support@opera-consonance.com)

[operaamp@vip.163.com](mailto:operaamp@vip.163.com)

<http://www.opera-consonance.com>



### Registration Card

Name

Address

City

State

Zip

Email

Telephone

Model

Serial Number

Purchase Date

Dealer