

CEMBALO

REAL EMOTION

OCEAN LOVE AMPLIFIER  
Finest Sound In The World

*Handcrafted in Canada*

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# *Operating Manual*

Finest Power Amplifier

*OCEAN Amplifier*

Notes:

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## Important safety instructions



Presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



Read and follow the safety and operating instructions contained in the instruction manual.



Never open the product as there is a risk of electric shock.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used use caution when moving the

cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

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

15. Do not listen at high volume levels for long periods of time to prevent hearing damage.

16. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment. The mains plug of the power supply cord shall remain readily accessible. Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents and choking hazards.

## Design Philosophy

We often ask, what really is the best playback device? According to cembalo, the emotion at the heart of a musical performance is where the real charm and beauty is found, and it has also been approved at the highest standard among playback devices. Cembalo, in its music playback pursuits, wants to retain the true nature of the composition while transmitting the raw emotional intensity and passion of the music.

It's just like being at a performance of Mozart's <Serenade in G major>: with the resounding, bright and lively melody of the major chords, our hearts become stirred and we are even unable to resist singing and dancing along with the music.

But if it suddenly changes to Chopin's <Nocturne in b Flat Minor>, with the gentle, restrained, even melancholic and plaintive ambiance created by the minor chords, we can feel the grief and desolation of the composer.

But, in fact, a lot of expensive equipment manufacturers are unable to fully grasp this concept. Some emphasize the resolution and the sound stage, but with the sound itself lacking emotion and feeling; several sound warm and sweet but lack vitality, producing a singular emotion which lacks authenticity. In Cembalo way, audio reproduction is the art of music playback, expressing the emotion of the music and conveying the passion of the composition. Many compare the playback with the live sound.

We have only one goal: ***Real Emotion.***

Cembalo pursues excellence, with no cost constraint, and without rigidly adhering to the measure index.

Listen - we seek the real nature of the music and the expression of its true feeling – guided by the auditory sense and impressions of those artists with whom we cooperate - and thus deeply involve ourselves in the choice of the basic structure of the circuit; a choice which is not limited by traditional structures.

Design – A precise mathematical model is constructed for the whole system, and is repeatedly optimized, so the whole circuit system is at the theoretical optimum point. The product's entire design and technology has the sole objective of making music vivid, lifelike, rich and vibrant.

Listen again and fine tune –With repeated listening, we fine tune, in order to express the

truly rich emotion of the music and the unprecedented real-life quality.

This process is just like the manufacture of jewels handed down for generations: first of all, an area containing minerals must be found in the boundless land; the gemstone of the best quality will then be selected among those extracted; then finally, through the craftsman's exquisite carving, a precious jewel emerges which lasts through the ages.

Cembalo, listen, hear the difference.

## German Descent

Philip Meyer, the founder of Cembalo Audio Laboratories, was born in Ladenburg Germany, a beautiful town on the right bank of the Neckar River. In 1989 Philip left his hometown to study electronic engineering and begin his career as an engineer in Hamburg, where Philip met the love of his life, his soul mate, a young violinist named Rose from Canada, and got hitched. They lived a very happy life in Hamburg. Unfortunately, Rose was injured and not able to play violin for the rest of her life after a car accident.

On account of the abrupt turnaround of the Philips life, Mr. and Mrs. Philip decided to come back to her hometown in Canada for a new life. Often, Philip played a CD recording of Rose's violin music, but he couldn't feel the emotion and the love in it, nor could he trace the uplifting, souled musical style of his loved one.

Shackled with nostalgia and longing, Philip hoped to bring back Rose's music that is full of beautiful memories. In the next few years, he dedicated his efforts entirely to the art of music playback and Cembalo Audio Laboratories was founded in 2015.

# General Information

## Introduction

From all of us at Cembalo Audio Laboratories, thank you for your choosing the Cembalo Ocean Power Amplifier. Used properly, it will give you many years of enjoyment.

A great deal of effort went into the design and construction of this “emotional” device, the Ocean Amplifier. It is built with the highest precision, taking into account every little detail. The "Listen, Design, Listen again" design process and our special technology (e. g. "ENERGY OCEAN ") allow us to produce Ocean Power Amplifier with truly rich natural sound, creating an unimaginable musical experience.

That is a musical experience with a level of esthetical and emotional verisimilitude only comparable by live symphony orchestra itself.

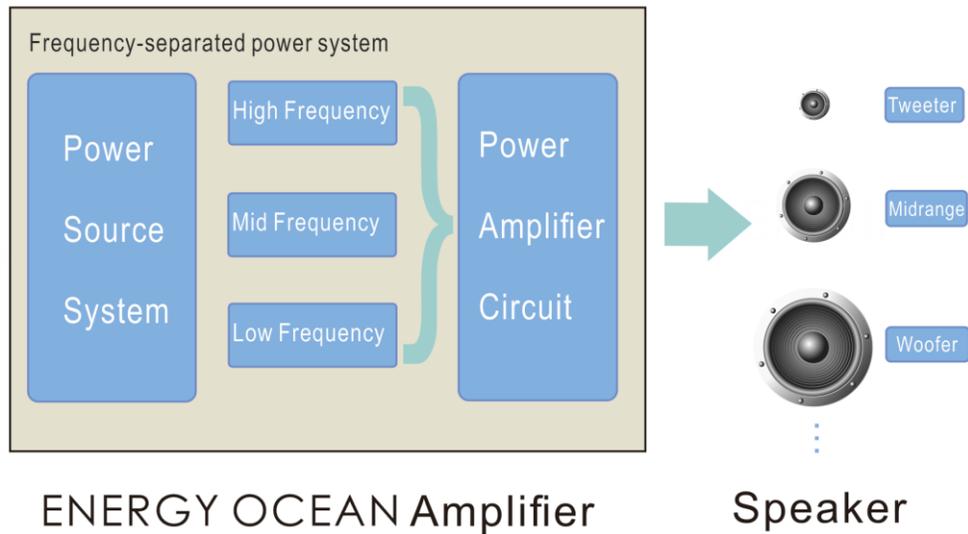
It is a power amplifier truly worth of the term “Kunstschatze”.

## Key Special Features

- Pure dual mono configuration
- 200 Watts Pure Class A mono
- DC-coupling, full balanced ultrafast-JFET Voltage Amplifier Stage (VAS)
- Specially designed full balanced, huge power output stage without negative feedback
- *ENERGY OCEAN* frequency-separated power system
- 1450,000µF power capacitor totally
- Flat frequency response to beyond 370 kHz
- Super high end *Mundorf foil* capacitors used
- Super high-end Shinkoh non-magnetics precision Tantalum Resistors
- High-end ETI Research gold plating tellurium Copper binding posts without any nickel
- 99.99998% (Ohno Continuous Cast) copper internal signal wires
- No board connectors, switches, relay or fuse whatsoever is located in the signal path
- Isolated power supply for display and control circuits
- Custom-built ultra-low noise regulated power supply for voltage amplifier stage
- Designed and Handcrafted in Canada

## Special Technology

### **ENERGY OCEAN** technology



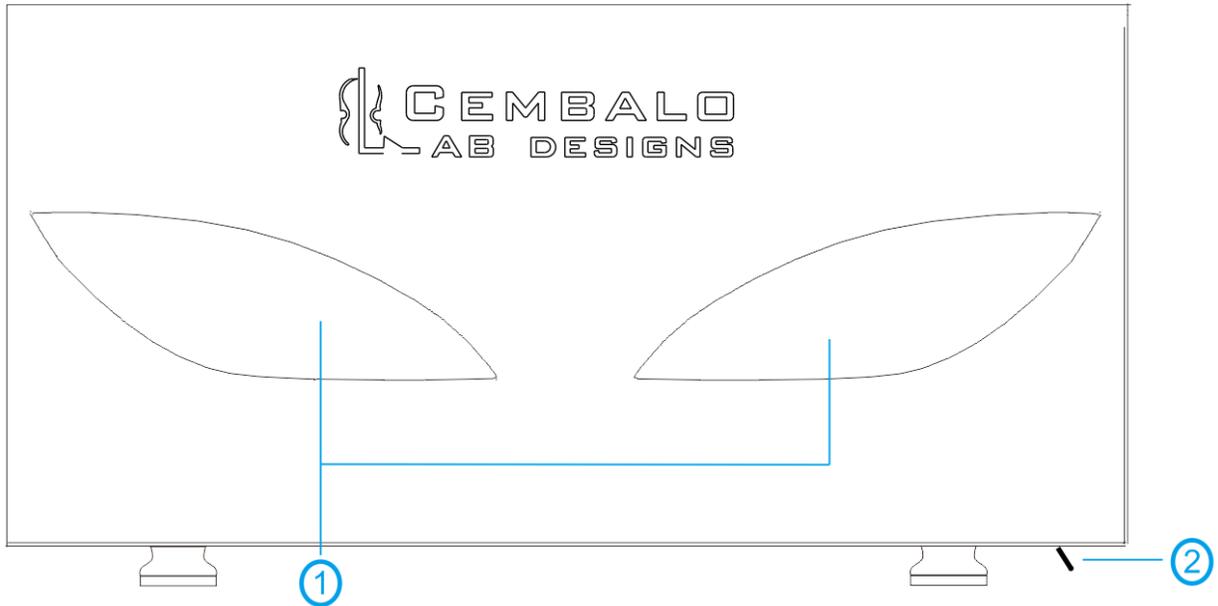
In fact any component cannot be ideal. For different frequency ranges, the discharge capacity of traditional power structure is not stable. Some of them have poor high frequency capacity; others are difficult to deal with low frequency high current. Anyway, every power system has an optimum frequency point with the best performance.

In contrast, the power system of *ENERGY OCEAN* amplifier is composed by a main power system and several second level power modules that are specially optimized for high, middle and low frequency range.

So the OCEAN amplifier used *ENERGY OCEAN* technology delivers outstanding performance with any frequency range. The result is an unimaginable experience with truly rich natural sound and emotional verisimilitude only bettered by the live musical event itself.

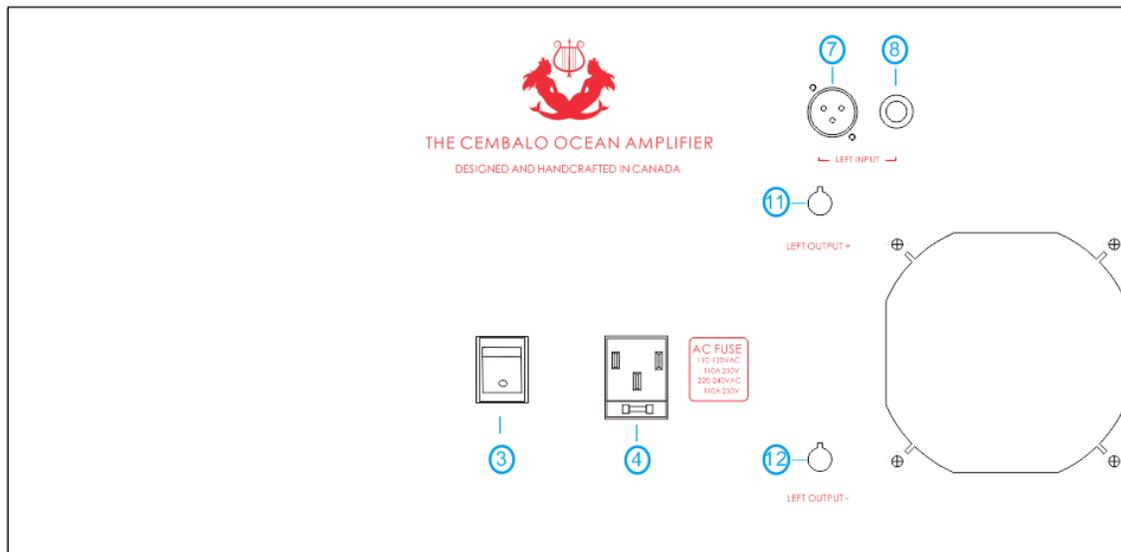
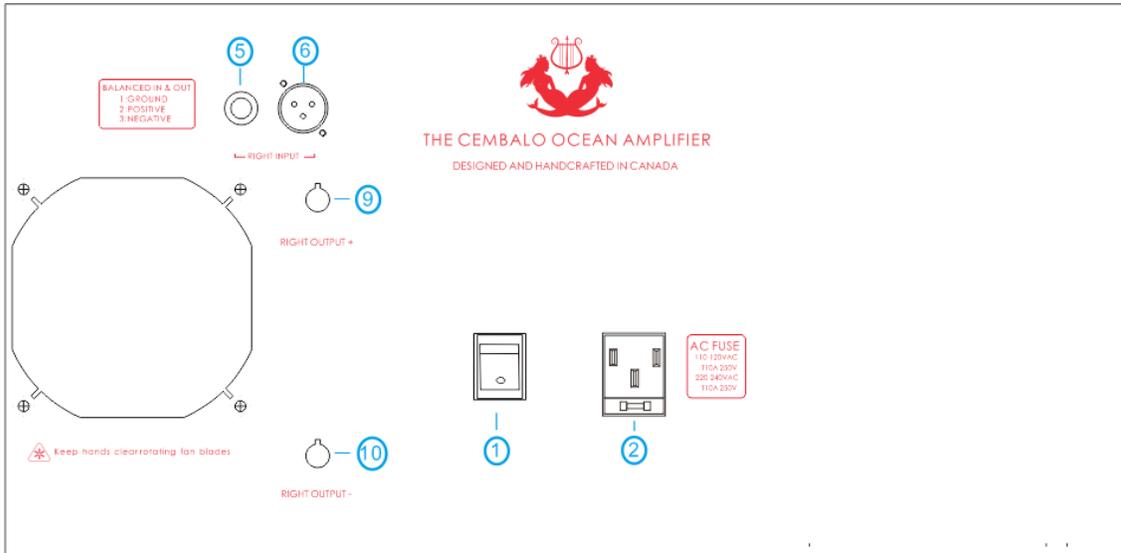
# Product overview

## Overview of the front panel



1. AC power LED
2. Standby mode on/off

## Overview of the rear panel



- 1 & 3: AC Power Switches
- 2 & 4: AC Power Connector
- 5 & 6: Right Balanced Analog inputs
- 7 & 8: Left Balanced Analog inputs
- 9 & 10: Right Balanced Analog output
- 11 & 12: Left Balanced Analog output

# Using the Ocean series amplifier

## Installation & Setup

Ensure sufficient **ventilation**. The Ocean amplifier generates much heat which is dissipated through the housing. It should not be installed near other heat sources or in tight enclosed areas.

Place the Ocean amplifier on a **flat, horizontal and solid** surface, instead of a carpet.

## Connecting the amplifier to the mains

Check your amplifier complies with your local A/C voltage and frequency requirements. If you use an unsuitable power supply, this can cause damage to the product.

Ocean series amplifiers are set at the factory (internally) for 100v, 120v, 220v, and 230v or 240v AC mains operation @ 50 or 60HZ. This voltage setting cannot be changed by the user.

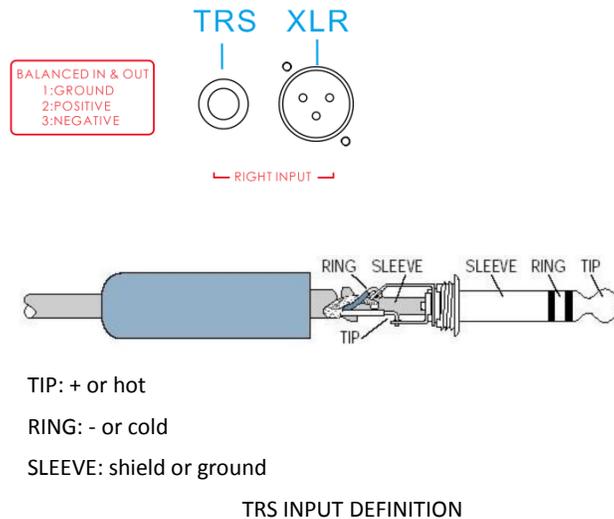
The OCEAN amplifier uses 2 fast acting fuses totally, located in a fuse drawer on rear panel. Turn off the unit and remove the power cord before attempting to remove and replace the fuse. Replace fuse with the same type and value.

For rear panel fuse: F 10A/250V

## Connecting the amplifier to audio sources

You can connect XLR-3 balanced input or professional 6.35mm balanced TRS input as audio sources to the OCEAN amplifier. We recommend the use of **dedicated balanced cables**.

Avoid the use of adaptors as they degrade performance.



We suggest before you connect or disconnect audio sources, power down the amplifier first.

To the perfect sound, the amplifier does not use any multichannel analog switch. As a result, only one type input can be connected a time. Do not connect XLR-3 and TRS input at the same time.

## Burn-In and Warm-Up the amplifier

Your Ocean series amplifier has been strictly tested and burned in for 72 hours before shipping. Sound performance will continue to improve during the first 40–50 hours of normal use.

The ocean amplifier must **work at a room temperature** (<24° C), because of Class A huge power dissipation. An air conditioner room is required in summer.

For the perfect performance the ocean amplifier takes approximately 20 minutes to warm up it.

## Ground Connection

It is **necessary** to use Earth Ground connection to minimum noises. Internally the earth ground from AC power cord is connected to the power circuit by default.

In order to avoid any noises from ground network, we recommend that the amplifier is solely connected to the physical Earth. Use high quality ground connection as best as possible.

## Care and Maintenance

Please disconnect the product from the AC power before cleaning. Never pour even small amounts of any liquid directly on the amplifier, as doing so may allow the liquid to reach the circuitry inside the unit. Any liquid inside the unit poses a hazard to both the user and to the unit and must be avoided. We suggest you only use a dry and soft cloth to clean the amplifier.

# Specifications

## Electrical

<b>Design Structure</b>	Dual Mono , DC-Coupling
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<b>Amplifier Class</b>	Class A
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<b>Output Power (RMS) per channel</b>	200W 8Ω, Class A
	1800W 1Ω

<b>S/N Ratio, 20-20000hz</b>	< -123dB
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<b>Distortion (THD+N)</b>	<0.007% @ 50W
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<b>Channel Separation</b>	Infinite
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<b>Input Impedance, balanced</b>	40K
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<b>MAX Output Power (PEAK) per channel</b>	6000W
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<b>Bandwidth (-3dB), max</b>	0 - 370kHz
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<b>Operating temperature range</b>	10°C – 24°C
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<b>Power Supply Capacity</b>	1450,000uf
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<b>Cooling mode</b>	forced air cooling
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## Dimensions

<b>Size (W x D x H), netto per channel</b>	
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<b>CM</b>	56x40x30
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<b>Inch</b>	22x15.8x11.8
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\*Specifications can to be changed by Cembalo Audio Designs without further notices.

## Warranty and Registration card

Cembalo Lab Ocean series products are warranted to be free from manufacturing defects under normal use for two years from the date of purchase. During the warranty period, any Cembalo component exhibiting defects in materials and/or workmanship will be repaired or replaced, at our option, without charge for either parts or labor, at our factory. The warranty will not apply to any Cembalo component that has been misused, disassembled or modified.

End users are supported in the guarantee through their distributor. In such case, please contact your dealer for full guarantee condition and service.

Please register your products to obtain direct Cembalo products. Please fill out the registration card and send it directly to Cembalo. Or email all information shown in registration card to us, and PDF form can be downloaded at support of our website, [www.cembalolab.com](http://www.cembalolab.com).



First Name: ..... Given Name: .....

Email: ..... Date of Purchase: .....

Address: ..... Post Code: .....

Product Model: ..... Serial Number: .....

Dealer: ..... City and Country: .....

Where did you get to know Cembalo product?

Dealer       Acquaintance       Online       Magazine

What can be improved on Cembalo or Cembalo Products in the future?

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 .....

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