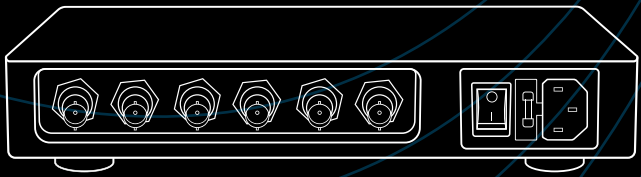
OCK-2S

10MHz Ultra Precision Low Phase Noise Clock For Audio

User Manual



LHY AUDIO

Dear Valued Customer,

Thank you for choosing a product from LHY Audio! We hope this product will meet your expectations and bring more enjoyment to your life.

Product Features

1. Six channels of 10.000 MHz clock signal output
2. Ultra-low phase noise: -110 dBc @ 1 Hz offset
3. Independent driver and isolation circuit for each output
4. Built with EMI filter, 15W Talema transformer (UK), and high-speed rectifier filtering
5. Equipped with three independent LT3042 + PNP ultra-low-noise linear DC regulators (μV-level)
6. Each output port uses gold-plated terminals with 50Ω / 75Ω impedance
7. Full aluminum alloy CNC-milled chassis with separated circuit sections to reduce interference and mechanical resonance

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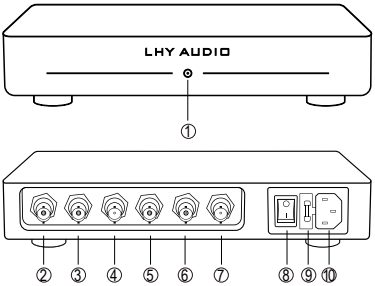
1. **Product Description**

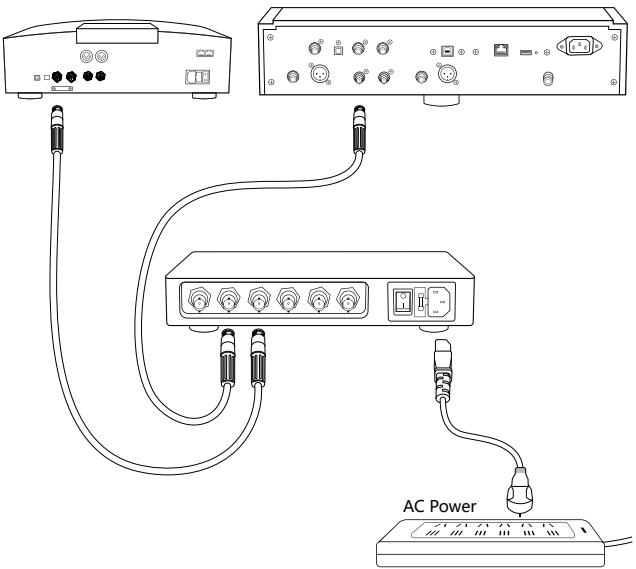


	Name	Description
①	Power Indicator	Blue LED Steady On
②	BNC Connector	50Ω Sine Wave
③	BNC Connector	50Ω Sine Wave
④	BNC Connector	75Ω Sine Wave
⑤	BNC Connector	50Ω Square Wave
⑥	BNC Connector	50Ω Square Wave
⑦	BNC Connector	75Ω Square Wave
⑧	Power Switch	I On O Off
⑨	Fuse Holder	Power Fault Fuse Protection
⑩	IEC Power Connector	Use a proper power cord to connect to mains power

2. **Device Connections**

When using the clock generator, first connect the power cord (as shown in the illustration), then turn on the power switch. After powering on, the indicator light will stay blue.

When connecting devices, use clock cables to link the clock generator to the devices you wish to connect (as shown in the illustration).



3. **Technical Specifications**

Parameters	Specifications
Number of Ports:	6 Outputs (3 × Square Wave / 3 × Sine Wave)
Output Impedance:	Square Wave: 50Ω × 2; 75Ω × 1 Sine Wave: 50Ω × 2; 75Ω × 1
Output Level:	1.4Vpp / 0.5Vrms / 7dBm (@50ohms)
Close-in Phase Noise:	≤-110dBc @ 1Hz Offset (typical) ≤-135dBc @ 10Hz Offset (typical) ≤-150dBc @ 100Hz Offset (typical) ≤-157dBc @ 1KHz Offset (typical) ≤-160dBc @ 10KHz Offset (typical)
Frequency Stability:	< ±5 ppb
Frequency Accuracy:	< ±0.05 ppm
Short-term Stability:	2×10^{-12} @ 1 s
Warm-up Time:	15 minutes (basic) / 60 minutes (full)
Power Consumption:	8 W (warm-up) / 5 W (operating)
Voltage:	220–240 VAC (customizable 110–120 VAC)
Dimensions:	240 × 175 × 50 mm (W × D × H)
Weight:	2.0 kg
Accessories:	Main Unit ×1 / AC Power Cord ×1

4. **Precautions**

To prevent equipment damage or personal injury due to improper use, please follow these precautions:

1. Before powering on the clock, ensure that the local mains voltage matches the voltage indicated on the clock.

2. Do not place the clock near water or in humid areas, and prevent water or moisture from entering the clock enclosure.

3. Keep the clock’ s operating environment clean; excessive dust can cause static buildup, reducing equipment lifespan and potentially causing communication faults.

4. Ensure that the clock’ s ventilation openings are unobstructed; do not stack or block them.

5. Before cleaning the clock, unplug the power cord. Do not wipe the clock with a damp cloth or use any liquid for cleaning.

6. To avoid electric shock, do not open the clock enclosure while it is powered on. Even when the device is not powered, do not open the enclosure casually.

5. **Troubleshooting**

Fault Symptoms	Possible Causes	Troubleshooting
PWR Power Indicator Not Lit	1. Power cord not connected or poor contact 2. Fuse blown	Connect the power cord properly Replace with a suitable fuse
No Response When Connecting BNC	1. Poor cable connection 2. Incorrect external input frequency	1. Ensure cables are properly connected 2. Use the correct clock signal

6. **Statement**

Without the explicit written permission of the company, no individual or organization may reproduce, copy, transcribe, or translate any part or the entirety of this manual, nor use it for any form or method of commercial or profit-driven dissemination (including electronic, photocopying, recording, or other means).

The product specifications and information mentioned in this manual are for reference only and are subject to change without notice. Unless specifically agreed otherwise, this manual serves solely as a user guide, and all statements herein do not constitute any form of warranty.

7. **Warranty Card**

Dear Valued Customer,

Thank you for purchasing a LHY Audio product!
This warranty card serves as proof of warranty for your LHY Audio product and should be kept by the user.With this card, you are entitled to receive after-sales repair services from LHY Audio. Please keep it in a safe place.

1. This product comes with a one-year warranty. During the warranty period, LHY AUDIO provides complimentary repair services. If repairs are needed after the warranty period has expired, LHY AUDIO will still offer repair services; however, labor and material costs will be charged to the customer.
2. Please ensure the product is properly packaged to avoid damage or loss during transportation.
3. To request warranty service, please return the product along with a fully completed warranty card and proof of purchase(such as a copy of the invoice or receipt).

Product Information

Item Name: _____ Product Model: _____

Product ID: _____ Purchase Date: _____

User Name: _____ Phone Number: _____

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