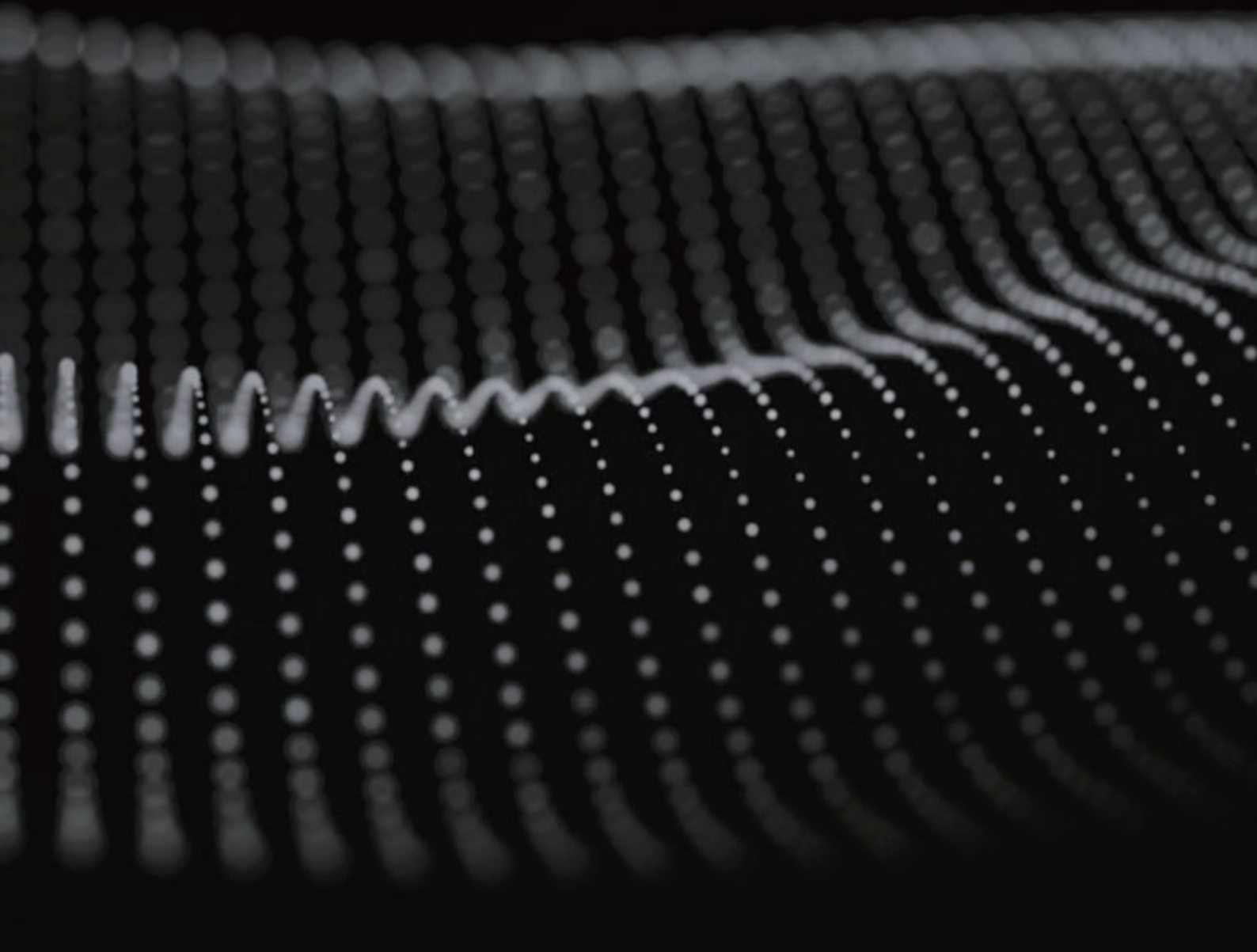


# DENAFRIPS

TERRA MCLK

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OWNER'S MANUAL



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# INSTALLATION & SAFETY INSTRUCTIONS

This MCLK is designed and built to provide trouble-free performance, but as with all electronic devices it is necessary to observe a few precautions:

1. Unpack the MCLK carefully.
2. Position the MCLK on a stable, horizontal surface, i.e. sturdy rack.
3. The MCLK supports voltage 100–125VAC or 220–250VAC worldwide voltage. Please select the correct voltage prior to connecting the power cord. Please connect the AC power cord with earth(ground) pin unless it is absolutely required to reduce hum from the ground loops of the connected devices.
4. Always ensure that when disconnecting and reconnecting your audio equipment the mains supply is turned off.
5. Position the power cord and signal interconnects where they are not likely cause trip and fall hazard.
6. Do not use the Equipment near water, or place water-filled containers on the Equipment. Entry of liquid into the Equipment is hazardous and may cause electric shock and/or fire hazard.
7. Do not place the unit under direct sunlight or heat source.
8. Do not remove any covers or try to gain access to the inside. There are no user adjustments or fuses to change without qualification.

# INSTALLATION & SAFETY INSTRUCTIONS

9. Clean regularly with a damp soft cloth. Do not use any cleaning agents as it might damage the surface finishing.
10. The electronics in modern hi-fi equipment is complex and may, therefore, be adversely affected or damaged by lightning. For protection of the audio system during electrical storms, disconnect the mains plugs.

# INTRODUCTION

Thank you for purchasing the DENAFRIPS TERRA MCLK.

The TERRA MCLK is our premium MASTER CLOCK GENERATOR.

Equipped with the advanced FPGA, and the dual OCXO operating at audio frequencies 45.1584Mhz, 49.152Mhz, encapsulated in a metal shielded casing, located at the centre of the MCLK.

These OCXO are specially designed for high-end audio applications with ultra-low phasenoise and ultra-accuracy. The dual OCXO are powered by the o-core transformer, multi stages linear regulator, supplying constant current to the OCXO. The adequate power reserves ensure the superior linearity and stability of the OCXO.



# OPERATING INSTRUCTION

## 3.1 Quick Start Guide

### Package Contents

1. TERRA MCLK

### Connection

1. Power: Use a proper AC power cord, connect it to the MCLK power socket.
2. Output: 75ohms BNC outputs of various clock frequencies are available. Please refer to the details in section 3.2 & 3.3.

### WARNING

1. Please power off all equipment prior connection/disconnection of cables.

# OPERATING INSTRUCTION

## 3.2 Front Panel



**Figure 1. Front Panel**

### (1) SETUP Button

Press the button once to enter configuration mode to setup the output frequency. Press the button once again to confirm and exit configuration mode.

### (2) GROUP1 / GROUP2

Toggle the GROUP 1 / GROUP 2 buttons to setup the output frequency as detailed in the following Table 1.

### (3) MAIN LED

The LEDs display the main output frequency 45.1584MHz, 49.152MHz.

### (4) GROUP1/GROUP 2 LED

The LEDs display the configured frequency of GROUP 1 / GROUP 2 as detailed in the following Table 1.

# OPERATING INSTRUCTION

BNC OUTPUT CONNECTOR	CONFIGURATION							
	GROUP1				GROUP2			
	MCLK/2	MCLK/4	44K1	CLOSE	MCLK/2	MCLK/4	44K1	CLOSE
45.1584 MHz 1/2	Fixed Output 45.1584 MHz				Fixed Output 45.1584 MHz			
49.152 MHz 1/2	Fixed Output 49.152 MHz				Fixed Output 49.152 MHz			
MCLK 1	22.5792 MHz	11.2896 MHz	44.1kHz	N/A				
MCLK 2					22.5792 MHz	11.2896 MHz	44.1kHz	N/A
MCLK 3					24.576 MHz	12.288 MHz	48kHz	N/A
MCLK 4	24.576 MHz	12.288 MHz	48kHz	N/A				

Table 1.Output Frequency Configuration

## Example:

1. Press SETUP button once to enter configuration mode
2. Toggle GROUP1 button to, MCLK/2/4, 44K1, CLOSE LEDs on/off as the button is being toggled.
3. Leave the LED at 44K1. Press SETUP button once to confirm the setting and exit configuration mode.
4. Output frequencies of BNC Connectors “MCLK1 and MCLK4” will be 44.1kHz and 48kHz respectively.



# OPERATING INSTRUCTION

## 3.3 Rear Panel



Figure 2. Read Panel

Description:

### (1) AC Power Supply

CAUTION! TERRA supports AC mains 100–125VAC or 220–250VAC worldwide voltage. Please select the correct voltage prior to connecting the power cord. The voltage selector is located at the bottom of the unit. Please use a good quality power cord with earth/ground pin connected.

### (2) GROUP1 OUTPUT

Connected the BNC 75ohms clock cable from the output to the external device. Please note that the clock frequency must be matched. Refer to Table 1. Output Frequency Configuration.

### (3) GROUP2 OUTPUT

Connected the BNC 75ohms clock cable from the output to the external device. Please note that the clock frequency must be matched. Refer to Table 1. Output Frequency Configuration.

# SPECIFICATIONS

Description	Parameters
Highlight	Ultra Low Jitter OCXO
	Adjustable Output Frequencies
	Small Form Factor
Clock Out (Fixed)	45.1548MHz x 2 49.152MHz x 2
Clock Out (Adjustable)	44.1kHz, 48kHz 11.2896MHz, 12.288MHz 22.5792MHz, 24.576MHz
Output Connector	BNC, 75ohms
AC Power Requirement	100–240VAC, 50/60Hz (Manual Selector)

# SPECIFICATIONS

Description	Parameters
Power Consumption	≤20W
Dimension	336W x 249D x 85H mm (including feet)
Weight	6 Kg
Color	Silver / Black
Warranty	36 Months

# After–Sales Service

1. Thank you very much for choosing DENAFRIPS products. This product comes with a one–year free warranty. During the warranty period, if the product malfunctions due to non–human factors, we will provide free repair or replacement services. Please provide the serial number on the warranty card when contacting customer support.

1. Within Warranty Period: Within one year from the date of purchase, under normal use and non–human damage, if there are any product quality or functional issues.

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DENAFRIPS provides free repair or replacement of parts and covers the round–trip shipping costs.

2. Within the Warranty Period: Within one year from the date of purchase, if any product quality or functional issues occur due to human–caused damage.

The specific charges will be determined based on the actual fault and the cost of replacing parts. Please contact our after–sales service center for a detailed repair quote. The customer is responsible for the round–trip shipping costs.

3. After the Warranty Period: Paid repair service will be available after the warranty period expires. We will continue to provide repair services for a fee.

Specific charges will be determined based on the actual fault condition and the cost of replacement parts. Please contact our after–sales service center for a detailed repair quote. The customer is responsible for the round–trip shipping costs.

# After-Sales Service

2. The product will not be eligible for free warranty service under any of the following conditions:
  - a. The product has exceeded the specified warranty period from the date of purchase.
  - b. The product does not match the model, barcode, or purchase date listed on the warranty card.
  - c. Unauthorized modification or repair of circuits or components by anyone other than DENAFRIPS technicians.
  - d. Damage caused by human factors (such as dropping, impact, water exposure, fire, etc.).
  - e. Damage caused by irresistible natural forces (such as earthquakes, floods, lightning strikes, etc.).
  - f. Damage caused by exceeding the allowed operating environment.
  - g. Damage caused by improper use or storage (including but not limited to: circuit or component burnout due to excessive voltage; damage to the casing or internal components due to impact; damage caused by excessive dust; product oxidation or corrosion, etc.).
3. This warranty policy applies only to customers who purchase products from the official website. For products purchased from distributors, the warranty terms will be governed by the warranty policy established by the seller.

# DENAFRIPS



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