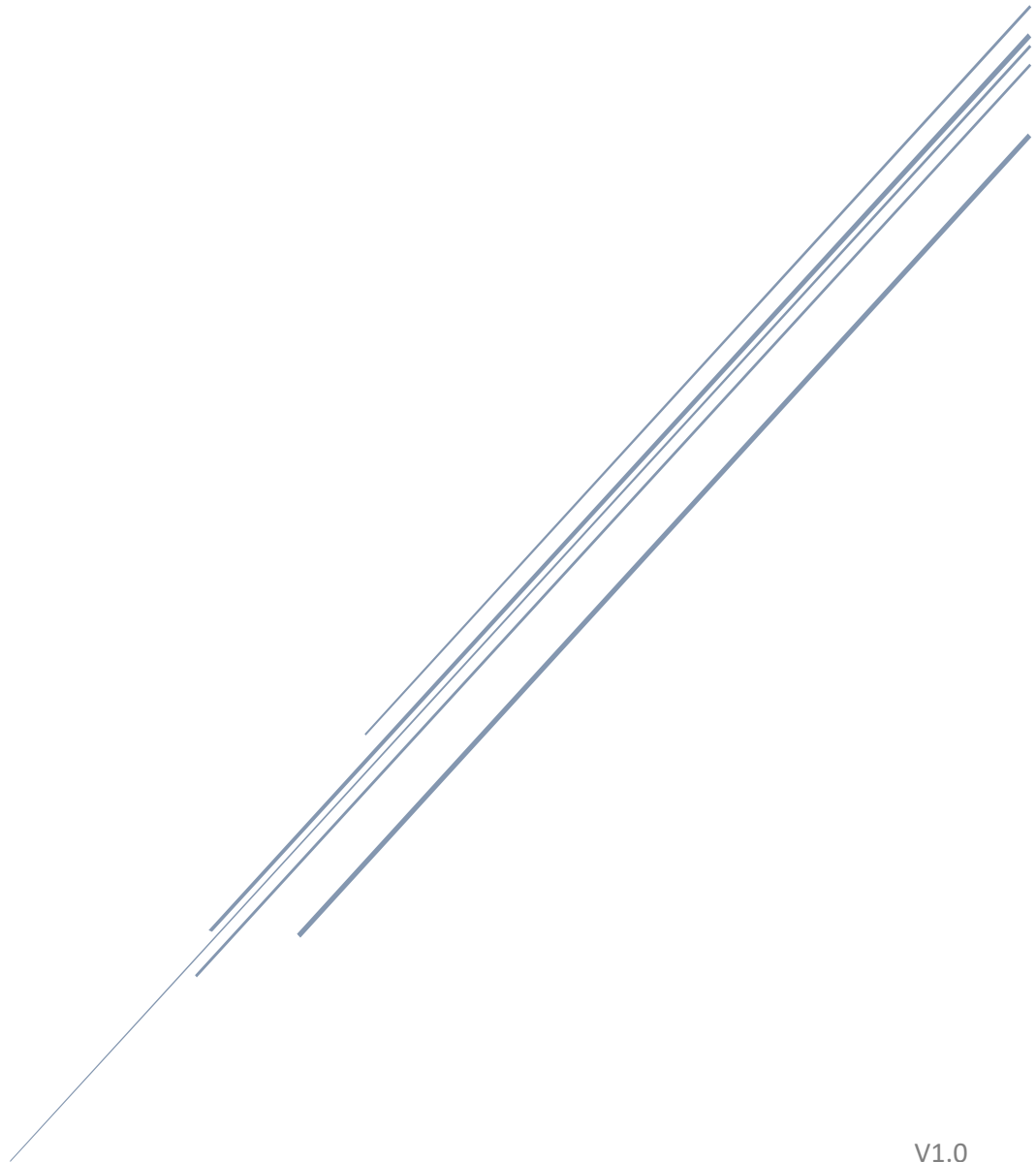


# DENAFRIPS

## TERRA MCLK

OWNER'S MANUAL



V1.0  
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## Contents

1. INSTALLATION & SAFETY INSTRUCTIONS .....	2
2. INTRODUCTION .....	3
3. OPERATING INSTRUCTION.....	4
3.1 Quick Start Guide .....	4
3.2 Front Panel .....	5
3.3 Rear Panel .....	0
4. SPECIFICATIONS.....	1
5. WARRANTY .....	2

## 1. 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:

- Unpack the MCLK carefully.
- Position the MCLK on a stable, horizontal surface, i.e. sturdy rack.
- 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.
- Always ensure that when disconnecting and reconnecting your audio equipment the mains supply is turned off.
- Position the power cord and signal interconnects where they are not likely cause trip and fall hazard.
- Do not use the MCLK near water, or place water-filled containers on the MCLK. Entry of liquid into the MCLK is hazardous and may cause electric shock and/or fire hazard.
- Do not place the unit under direct sunlight or heat source.
- Do not remove any covers or try to gain access to the inside. There are no user adjustments or fuses to change without qualification.
- Clean regularly with a damp soft cloth. Do not use any cleaning agents as it might damage the surface finishing.
- 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.

## 2. 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 phase-noise 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.



## 3. OPERATING INSTRUCTION

### 3.1 Quick Start Guide

#### Package Contents

- TERRA MCLK

#### Connection

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

#### WARNING

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

## 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) GROUP 1 / GROUP 2

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) GROUP 1 / GROUP 2 LED

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

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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.

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## 3.3 Rear Panel



Table 2. Rear 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*



## 4. 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)
Power Consumption	≤ 20W
Dimension	340W x 260D x 66H mm (Feet +18mm)
Weight	6 Kg
Color	Silver / Black
Warranty	36 Months
Highlight	Ultra Low Jitter OCXO
	Adjustable Output Frequencies
	Small Form Factor

## 5. WARRANTY

DENAFRIPS TERRA purchased from the Authorized Distributor comes with 36 months of warranty from the date of purchase / delivery (whichever later).

<b>Defective Within</b>	<b>Warranty Policy</b>
First 30 Days	DENAFRIPS to bear both way shipping fee.
Within 1st Year	Customer to bear one-way shipping fee. DENAFRIPS shall cover the return shipping fee.
Out of Warranty	Customer to bear both way shipping cost. DENAFRIPS to provide repair / maintenance services at cost.