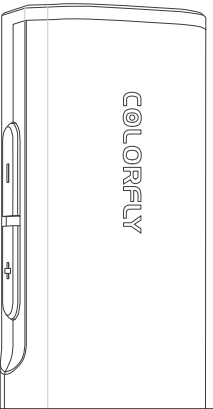


COLORFLY®

COLORFLY CDA M1P

说明书



Colorfly CDA M1P是一款高保真USB DAC耳放产品。其硬件由支持高规格音频格式的音频桥控制器CT7601PR和高性能数模转换器 AK4493SEQ以及两颗超低噪声、高输出能力的驱动器组成，具备模拟输出平衡和非平衡双接口。具备2个可配置的功能按键、1个可配置的RGB指示灯、3.5mm单端立体声和4.4mm平衡立体声双耳机输出接口，超小型化的设计，PCB外形尺寸仅51.5mmx16.7mm。

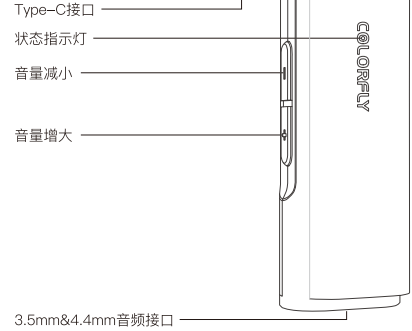
主要特性

- USB2.0 高速兼容
- 支持 UAC2.0 和 UAC1.0（通过按键设置模式）
- USB 总线供电
- 支持通过 USB 播放的 PCM 和 DSD 音频硬解码
- 支持 PCM 规格
UAC2.0 模式：16/24/32bit, 44.1/48/88.2/96/176.4/192/352.8/384/705.6/768KHz
UAC1.0 模式：16bit, 44.1/48KHz
- 支持 DSD 规格
UAC2.0 模式：1x (DSD64) /2x (DSD128) /4x (DSD256)
- 通过 USB 传输 DSD 音频的支持模式：DoP (DSD 1x/2x/4x), Native (DSD 1x/2x/4x/8x)
- 具备专有的 ASIO 驱动（仅对于 UAC2.0），支持超低延时的 ASIO 播放。
- 具备输出电平模式切换功能。
- 具备数字滤波器切换功能。
- 具备断电音量记忆功能，当按键音量设置到最大和最小时，白色灯闪烁 1 次。

- 支持 Windows 7/8/10/11^[1]、Mac OS、Android^[2]、iOS^[3]
[1]需要安装专用 ASIO 驱动，Windows10以上系统也可以使用系统自带的 UAC2.0 驱动。
- [2]需要 Android 设备支持并开启 OTG以及UAC2.0。
- [3]连接Lighting设备时需要使用OTG线材。

接口和功能信息

顶部图示



功能按键说明

- 按键 1：音量增大
短按，音量加 1 级。长按 1 秒后，音量连续加。
按下不放再开机，设备工作于 UAC1.0 模式。
- 按键 2：音量减小
短按，音量减 1 级。长按 1 秒后，音量连续减。
按下不放再开机，设备进入强制烧录模式。
- 按键 1+ 按键 2
同时按下，短按，切换输出负载模式。
长按 1 秒后，切换滤波器模式。

RGB指示灯定义

UAC模式	负载模式	音频流格式	采样率	显示的混合颜色
UAC2.0	低电平模式	PCM	44.1k、48k	红
			88.2k~768k	绿
	高电平模式	PCM	44.1k、48k	黄
			88.2k~768k	青
UAC1.0	低电平模式	/	/	红-慢闪烁
	高电平模式	/	/	黄-慢闪烁

负载模式说明

设备具备两个负载模式：低阻模式和高阻模式。模式的切换由组合按键实现，即“音量加”和“音量减”同时按下后，可切换负载模式。（开机默认为低阻模式）
负载模式是为优化设备接入不同阻抗负载时的输出特性，一般根据负载的典型阻抗大小来选用对应的模式：

接入的负载阻抗	适用的负载模式
小于或等于 120Ω	低阻模式
大于 120Ω	高阻模式

数字滤波器模式说明

设备具有 6 个可选用的 PCM 滤波器模式，并具备掉电记忆。

滤波器模式	适用的负载模式
模式1	Short Delay Sharp Roll-off filter
模式2	Sharp Roll-off filter
模式3	Short Delay Slow Roll-off filte
模式4	Slow Roll-off filter
模式5	Super Slow Rol-off filter
模式6	Low Dispersion Short Delay filter

设备工作期间，按键 1 和按键 2 同时按下后，并且保持 1 秒以上（即长按组合键）时，可切换一次滤波器模式，按照上表所列顺序切换。

当进行切换滤波器模式的操作时，LED 会做相应的状态提示：

切换到的模式	LED实时提示
模式1-5	白色灯闪烁1次
模式6	白色灯闪烁2次

设置UAC1.0模式说明

- 常态下，通电后设备会默认工作于 UAC2.0 模式。可以通过手动设置使设备通电后工作于 UAC1.0 模式。
- 设备工作期间，不能切换 UAC 模式。
- 让设备工作于 UAC1.0 模式的操作方法：在设备断开连接（断电）的前提下，先按下按键 1 并保持住不放开，然后将设备连上主机（电脑、手机、游戏机）的 USB 接口（通电），待指示灯闪烁后就可以放开按键，设备就会工作在 UAC1.0 模式了。

注：Colorfly CDA M1 在输出设计有模拟开关用于抑制开关机的 POP 噪声，同时在暂停和播放时会控制开关动作来抑制 PCM/DSD 之间的切换爆音，模拟开关元件在切换时会有微小的声音串入。

保修卡

型号: _____

姓名: _____

电话: _____

购买日期: _____

经销商盖章: _____

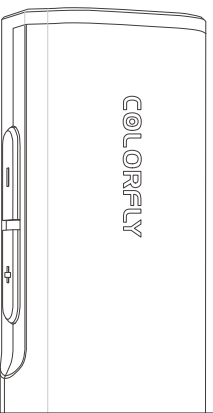
售后服务承诺：

- 1、本产品的保修严格按照国家“三包”规定执行。
- 2、自购买之日起，因产品本身质量问题引起的故障，实行七天内包退，十五天内包换，一年内免费维修。
- 3、连接线、电池等附件不属于保修范畴。
- 4、以下情况不属于保修范围，我公司可提供有偿服务：
①已超出保修期限
②意外因素和人为因素引起的产品故障
③因不可抗力力如地震、火灾等导致的产品故障或损坏
- 5、购买日期以盖章的保修卡所填写之日期为准，如保修卡无效，以购买发票日期为准。
- 6、如您购买的产品出现问题，请将产品送至指定服务点，或者通过电话、与我公司联系需要保修时请将产品与本保修卡一同送往所购买之销售商处进行保修。运费由用户承担。

COLORFLY®

COLORFLY CDA M1P

User Manual



The Colorfly CDA M1P is a high-fidelity USB DAC headphone amplifier product. It consists of the audio controller CT7601PR, which supports high-spec audio formats, a high-performance digital-to-analog converter AK4493SEQ, and two ultra-low noise but high-output drivers. It features both balanced and unbalanced analog output interfaces. The device includes 2 configurable function keys, 1 configurable RGB indicator light, a 3.5mm single-ended stereo, and a 4.4mm balanced stereo headphone output interface. The PCB has an incredibly compact design, with dimensions only 51.5mm x 16.7mm.

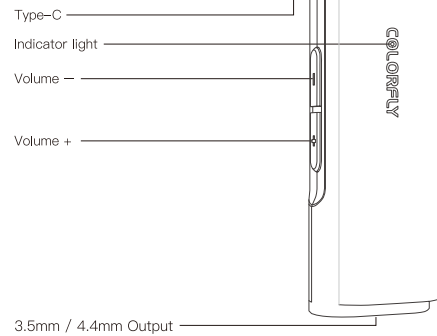
KEY FEATURES

- USB 2.0 high-speed compatibility
- Supports UAC2.0 and UAC1.0 (switchable through button settings)
- USB bus-powered
- Supports PCM and DSD audio hardware decoding via USB playback
- PCM Specifications:
UAC2.0 Mode: 16/24/32bit, 44.1/48/88.2/96/176.4/192/352.8/384/705.6/768KHz
UAC1.0 Mode: 16bit, 44.1/48KHz
- DSD Specifications:
UAC2.0 Mode: 1x (DSD64)/2x (DSD128)/4x (DSD256)
- Supports DSD audio transfer modes via USB: DoP (DSD 1x/2x/4x), Native (DSD 1x/2x/4x/8x)
- Dedicated ASIO driver support (for UAC2.0 only) with ultra-low latency ASIO playback
- Output level mode switch function
- Digital filter switch function
- Power-off volume memory function (white light flashes once when volume is set to the maximum or minimum)

- Compatible with Windows 7/8/10/11^[1], Mac OS, Android^[2], and iOS^[3]
[1]Requires a dedicated ASIO driver to be installed, Windows 10 or above can also use the UAC2.0 driver that comes with the system.
- [2]Requires Android devices to support and enable OTG and UAC2.0.
- [3]OTG cable is required to connect to the Lighting device.

INTERFACE AND FUNCTION INFORMATION

Top illustration



Function Button Instructions

- Button 1: Volume Increase
Short press: Increase the volume by 1 level.
Long press for 1 second: Continuously increase the volume.
Press and hold while powering on the device to operate in UAC1.0 mode.
- Button 2: Volume Decrease
Short press: Decrease the volume by 1 level.
Long press for 1 second: Continuously decrease the volume.
Press and hold while powering on the device to enter the forced burning mode.
- Button 1 + Button 2
Simultaneously press: Short press to switch the output load mode.
Long press for 1 second: Switch the filter mode.

Definition of RGB Indicator Light

UAC Mode	Load Mode	Audio Stream Format	Sampling Rate	Displayed Mixed Colors
UAC2.0	Low-Level Mode	PCM	44.1k、48k	Red
			88.2k~768k	Green
	High-Level Mode	PCM	44.1k、48k	Yellow
			88.2k~768k	Cyan
UAC1.0	Low-Level Mode	/	/	Red - Slow Blinking
	High-Level Mode	/	/	Yellow - Slow Blinking

Loading mode description

The device has two load modes: low resistance mode and high resistance mode.
The mode switch is realized by the combination button, i.e. "Volume Up" and "Volume Down" can switch the load mode when pressed at the same time. (Low resistance mode is the default at power on)
The load mode is designed to optimize the output characteristics of the device when connected to a load with different impedance, and is generally selected according to the typical impedance of the load.

Load impedance connected	Applicable load mode
Less than or equal to 120Ω	Low resistance mode
Greater than 120Ω	High resistance mode

Digital Filter Mode Instructions

The device has 6 selectable PCM filter modes and comes with power-off memory.

Filter Mode	Filter Name
Mode1	Short Delay Sharp Roll-off filter
Mode2	Sharp Roll-off filter
Mode3	Short Delay Slow Roll-off filte
Mode4	Slow Roll-off filter
Mode5	Super Slow Rol-off filter
Mode6	Low Dispersion Short Delay filter

During device operation, when both Button 1 and Button 2 are pressed simultaneously and held for at least 1 second (i.e., long-pressing the combination key), the filter mode can be switched once, following the order listed in the table above.
During the process of switching filter modes, the LED will provide corresponding status indications.

Switched Mode	LED Real-time Indication
Mode1-5	White light flashes 1 time
Mode6	White light flashes 2time

Setting UAC1.0 Mode Instructions

- By default, the device operates in UAC2.0 mode when powered on. However, you can manually set the device to work in UAC1.0 mode.
- During device operation, switching UAC modes is not possible.
- To set the device to work in UAC1.0 mode, follow these steps:
Ensure the device is disconnected (powered off).
Press and hold Button 1 without releasing it.
Connect the device to the USB port (power source) of the host (computer, smartphone, game console).
Wait for the indicator light to flash.
Release Button 1 after the light flashes.
The device will be operating in UAC1.0 mode.

Note: The Colorfly CDA M1 is designed with analog switches on the output to suppress POP noise from switching on and off, while the switch is controlled during pause and playback to suppress switching pops between PCM/DSD, and the analog switching element makes a tiny sound when it switches.

- (1) 本手册上所有图片仅供参考，请以实物为准。产品信息会依不同国家及地区而有所变动，我们诚挚的建议您与当地的经销商或零售商确认目前销售产品的规格。
- (2) 产品颜色可能会因拍照角度而与实际产品有所差异。我们会尽力提供正确与完整的数据到网页上，并保留随时更正、修改页面信息的权利，恕不另行通知。
- (3) 为保证用户的安全及合法权益，请按照本使用手册操作。如不遵照本手册规范操作，对此所造成的后果我们不承担任何形式的责任。
- (4) 以上所有产品所涉及的其它名称及商标，我公司拥有最终解释权。本手册的版本会随着产品及驱动程序的升级而变动。版权所有，不得翻印。

- 1、Pictures for reference only, subject to our available products. Product information may vary slightly, depending on your country or region.Please contact local dealers for latest product specification.
 - 2、The color of product may differ from the actual product depending on the camera angle and screen settings . We will try our best to provide the accurate and complete data online. We reserve the right to modify the page information at any time without prior notice.
 - 3、To ensure safety and legitimate rights of users, please operate according to manual. If the operation is not in accordance with manual, Colorful do not accept any form of responsibility for the consequences.
 - 4、For all above product name and related trademark, we reserved the right of final interpretation.
- The version of manual is subject to product and driver upgrades.
All copyrights reserved. Reproduction is prohibited.

Warranty Card

Model: _____

Name: _____

Phone: _____

Purchase date: _____

Dealer stamp: _____

After-sales service commitment:

1. The warranty of this product is strictly in accordance with the national "Three Guarantees" regulations.
- 2.From the date of purchase, due to the quality of the product itself in case of failure, return within 7 days, replacement within 15 days, within one year Free maintenance.
3. Accessories such as cables and batteries are not covered by the warranty.
4. The following conditions are not covered by the warranty, our company can provide Paid service:
①The warranty period has expired.
②Product failure caused by accident and human factors.
③Product failure or damage caused by force majeure such as earthquake, fire, etc.
5. The purchase date is subject to the date filled in the stamped warranty card, such as
6. If there is a problem with the product you purchased, please send the product to the designated server.
Service point, or contact our company by phone or when you need a warranty.
Please send the product together with this warranty card to the seller where you bought it.
Carry out the warranty. The freight is borne by the user.