



Manuals.plus /

- › **Cooler Master** /
- › Cooler Master ARGB LED Controller User Manual

Cooler Master MFP-ACBN-NNUNN-R1

Cooler Master ARGB LED Controller User Manual

Model: MFP-ACBN-NNUNN-R1

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Cooler Master ARGB LED Controller. This compact hub allows for easy customization of Addressable RGB (ARGB) devices without requiring an ARGB-compatible motherboard or dedicated software, offering versatile lighting control for your PC.

2. SAFETY INFORMATION

- Ensure all power is disconnected from your PC before installation to prevent electric shock or damage to components.
- Handle the controller and cables with care. Do not bend or pull cables excessively.
- Keep the device away from liquids, excessive heat, and direct sunlight.
- Only use the provided cables and accessories with the controller.
- Do not attempt to open or modify the controller. This will void the warranty.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Cooler Master ARGB LED Controller
- Fan-signal wire
- Case-restart wire
- Motherboard restart wire

- 4-Pin RGB connector
- 4-Pin motherboard connector
- USB header connector
- USB adapter
- ARGB 3-Pin motherboard connector
- Thermal detection wire
- 4 x ARGB 3-pin connectors

4. PRODUCT OVERVIEW



Figure 4.1: Front view of the Cooler Master ARGB LED Controller, showing the control buttons.

EASY TO SWITCH BETWEEN ARGB AND RGB LIGHTING CONTROL

1. LED Mode Adjustment
2. ARGB & RGB lighting Mode
3. LED Color Adjustment
4. LED Speed Adjustment



Figure 4.2: Side view of the controller highlighting the four control buttons: 1. LED Mode Adjustment, 2. ARGB & RGB Lighting Mode, 3. LED Color Adjustment, and 4. LED Speed Adjustment.



Figure 4.3: The controller's side ports for connecting 3-pin ARGB fans and accessories.



THERMAL DETECTION FUNCTION

With Thermal Detection Cable, temperature can be monitored and displayed through color lighting effects

COLOR	DISPLAY
BLUE	COOL
GREEN	OPERATING
RED	ALERT

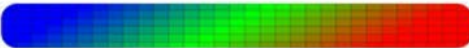


Figure 4.4: The thermal detection port on the controller. When connected, the lighting effects can display system temperature: Blue for Cool, Green for Operating, and Red for Alert.

COMPATIBLE WITH MOTHERBOARD CONTROL OF LIGHTING

With header Connection to
Motherboard as well as compatible
with motherboard software to
control lighting



Figure 4.5: The controller's compatibility with motherboard control, showing RGB and ARGB header connections for integration with motherboard software.



Figure 4.6: Bottom view of the controller, showing the USB port, 4-pin RGB port, and 3-pin ARGB ports for various connections.

5. SETUP AND INSTALLATION

- 1. Power Connection:** Connect the controller to your power supply unit (PSU) using the provided SATA power cable. Ensure a secure connection.
- 2. ARGB/RGB Device Connection:** Connect your 3-pin ARGB devices (fans, LED strips) to the designated 3-pin ARGB ports on the controller. For 4-pin RGB devices, use the 4-pin RGB connector. The controller supports up to 4 ARGB devices.
- 3. Motherboard Connection (Optional):**
 - For motherboard software control (e.g., ASUS Aura Sync, Gigabyte RGB Fusion, MSI Mystic Light, ASRock Polychrome), connect the controller to your motherboard's ARGB header using the ARGB 3-Pin motherboard connector.
 - Alternatively, connect the controller to a USB header on your motherboard using the USB header connector for software control via Cooler Master's MasterPlus software.
- 4. Thermal Detection Cable (Optional):** Connect the thermal detection wire to the designated port on the controller and place the sensor in a location where you wish to monitor temperature (e.g., near a CPU or GPU).
- 5. Case Integration (Optional):** The controller features in-frame magnets for easy attachment to any metallic surface inside your PC case.

6. OPERATING INSTRUCTIONS

The Cooler Master ARGB LED Controller can operate in two primary modes: standalone control via physical buttons

or software control via a connected motherboard/USB.

6.1 Standalone Control (Physical Buttons)

Use the buttons on the controller (refer to Figure 4.2) to cycle through lighting effects:

- **LED Mode Adjustment (Button 1):** Press to change the overall lighting effect mode (e.g., static, breathing, color cycle).
- **ARGB & RGB Lighting Mode (Button 2):** Press to switch between ARGB and RGB lighting control, allowing compatibility with both types of devices.
- **LED Color Adjustment (Button 3):** Press to change the color of the current lighting effect.
- **LED Speed Adjustment (Button 4):** Press to adjust the speed of dynamic lighting effects.

6.2 Software Control (MasterPlus Software)

For advanced customization and synchronization, connect the controller to your PC via USB and use the Cooler Master MasterPlus software. This software provides a graphical interface to:

- Access a wider range of lighting effects and color options.
- Fine-tune color, brightness, and speed settings.
- Synchronize lighting across multiple Cooler Master devices.
- Monitor system temperatures if the thermal detection cable is connected, with lighting effects reflecting temperature changes (Blue: Cool, Green: Operating, Red: Alert).

Download the latest MasterPlus software from the official Cooler Master website.

7. MAINTENANCE

- Keep the controller free from dust and debris. Use a soft, dry cloth for cleaning.
- Ensure proper airflow around the controller to prevent overheating.
- Regularly check cable connections to ensure they are secure.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No lighting/Controller unresponsive	No power, loose connections, incorrect wiring.	Ensure SATA power cable is securely connected to PSU. Check all ARGB/RGB device connections. Verify correct 3-pin ARGB or 4-pin RGB connection type.
Lights not displaying correctly/Flickering	Incorrect mode selected, faulty device, software conflict.	Try cycling through LED modes using the controller buttons. Ensure you are using the correct ARGB (3-pin) or RGB (4-pin) mode. If using software, ensure it's updated and not conflicting with other RGB software. Try reinstalling MasterPlus.
Controller not detected by MasterPlus software	USB connection issue, outdated firmware, software bug.	Ensure the USB header cable is securely connected to both the controller and the motherboard. Try a different USB header. Download and install the latest MasterPlus software. Check for firmware updates for the controller within MasterPlus (run as administrator).
Thermal detection not working	Thermal cable not connected or faulty.	Ensure the thermal detection wire is securely plugged into the controller. Verify the sensor is placed correctly to detect temperature.

9. SPECIFICATIONS

Feature	Detail
Model Number	MFP-ACBN-NNUNN-R1
Dimensions (L x W x H)	2.09 x 0.59 x 3.46 inches (53 x 15 x 88 mm)
Interface	Micro USB 2.0
Connector Type	3-pin 5 Vdc (ARGB), 4-pin 12 Vdc (RGB), SATA Power
Compatible Devices	ARGB/RGB Fans, LED Strips, PC Motherboards
Special Feature	Thermal Detection Function, In-frame Magnets

10. WARRANTY AND SUPPORT

Cooler Master products come with a limited warranty. For detailed warranty information, technical support, and frequently asked questions, please visit the official Cooler Master support website:

www.coolermaster.com/support/

Please retain your proof of purchase for warranty claims.

