

ZOTAC ZT-A30710B-10P

ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo Graphics Card Instruction Manual

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the installation, operation, and maintenance of your ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo graphics card. Please read this manual thoroughly before installation and retain it for future reference.

The ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo is built on the NVIDIA Ampere architecture, featuring enhanced RT Cores and Tensor Cores, new streaming multiprocessors, and superfast GDDR6X memory. It is designed to deliver high-fidelity gaming experiences.



Figure 1: ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo Graphics Card, front view.

Key Features:

- NVIDIA Ampere architecture, 2nd Gen Ray Tracing Cores, 3rd Gen Tensor Cores
- 8GB 256-bit GDDR6X memory, 19 Gbps, PCIE 4.0
- HoloBlack Design with SPECTRA 2.0 RGB Lighting
- IceStorm 2.0 Advanced Cooling with 3x 100mm fans, FREEZE Fan Stop, and Active Fan Control
- PowerBoost and Dual BIOS
- Metal RGB Lighted Backplate
- 8K Ready, 4 Display Ready, HDCP 2.3, VR Ready
- Boost Clock 1890 MHz

2. SETUP AND INSTALLATION

System Requirements:

- PCI Express 4.0 compliant motherboard with one x16 graphics slot.
- 750-watt power supply recommended.
- Minimum of 2 x 8-pin and 1 x 6-pin power connectors from the power supply.
- Windows 10 64-bit (build 2004 or later) operating system.
- Minimum 6.56 pounds of available space in your PC case.
- Dimensions: 355.9mm (Length) x 145.7mm (Height) x 59.7mm (Width, 3 slot).

Installation Steps:

1. **Prepare your system:** Power off your computer and disconnect all cables. Open your computer case.

2. **Locate the PCIe slot:** Find an available PCI Express x16 slot on your motherboard.
3. **Remove existing graphics card (if any):** Carefully remove any existing graphics card and its power connectors.
4. **Install the ZOTAC Gaming GeForce RTX 3070 Ti:** Align the graphics card with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip on the motherboard clicks into place.
5. **Secure the card:** Use screws to secure the graphics card to the PC case's expansion slot brackets.
6. **Connect power:** Connect the 2 x 8-pin and 1 x 6-pin power connectors from your power supply to the corresponding ports on the graphics card.
7. **Close the case and connect peripherals:** Close your computer case, reconnect all cables, and power on your system.
8. **Install drivers:** Once your operating system loads, install the latest NVIDIA Game Ready Drivers or NVIDIA Studio Drivers from the official NVIDIA website.



Figure 2: Front view of the graphics card, highlighting the triple fan cooling system.

Connecting Displays:

The graphics card supports up to four simultaneous displays. It features:

- 3 x DisplayPort 1.4a (up to 7680x4320@60Hz)
- 1 x HDMI 2.1 (up to 7680x4320@60Hz)

Ensure you use compatible cables for your desired resolution and refresh rate. HDCP 2.3 is supported.



Figure 3: Display output ports on the graphics card, including DisplayPort and HDMI.

3. OPERATING YOUR GRAPHICS CARD

Software Compatibility:

- Game Ready Drivers and NVIDIA Studio Drivers
- Microsoft DirectX 12 Ultimate, Vulkan RT API
- OpenGL 4.6

Regularly update your graphics drivers to ensure optimal performance and compatibility with the latest games and applications.

RGB Lighting (SPECTRA 2.0):

The card features SPECTRA 2.0 RGB Lighting, which can be customized to match your system's aesthetic. This includes the HoloBlack design elements and the Metal RGB Lighted Backplate. An external LED strip can also be connected for synchronized lighting effects.



Figure 4: Angled view of the graphics card showcasing its customizable RGB lighting.

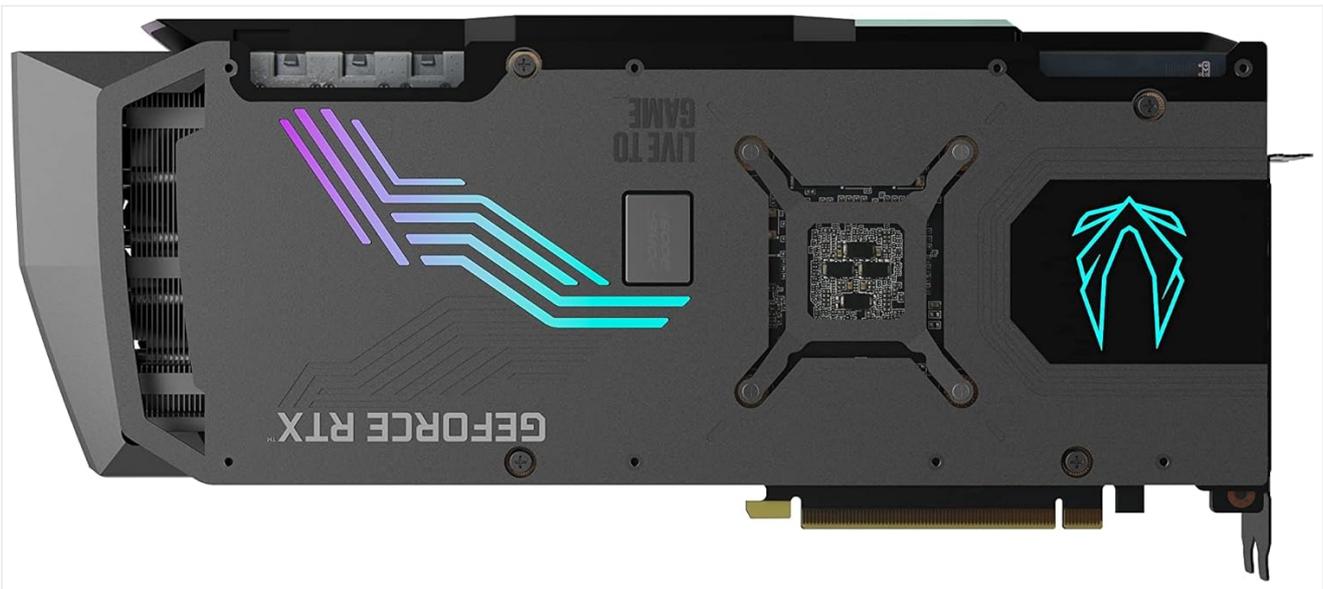


Figure 5: Rear view of the graphics card, highlighting the RGB lighted backplate.

4. MAINTENANCE

To ensure the longevity and optimal performance of your graphics card, regular maintenance is recommended.

Cooling System:

The IceStorm 2.0 Advanced Cooling system features three 100mm fans. Key cooling features include:

- **Active Fan Control:** Dynamically adjusts fan speeds based on GPU temperature.
- **FREEZE Fan Stop:** Fans will stop completely during low-load conditions to reduce noise and conserve power.

Periodically inspect the fans and heatsink for dust buildup. Use compressed air to gently clean any accumulated dust to maintain efficient cooling. Ensure adequate airflow within your PC case.

5. TROUBLESHOOTING

If you encounter issues with your graphics card, consider the following general troubleshooting steps:

- **No display or black screen:** Ensure all power cables are securely connected to the graphics card and the power supply. Verify that the display cable is properly connected to both the graphics card and the monitor. Try a different display output port or cable.
- **Driver issues:** Uninstall existing graphics drivers using a driver uninstaller utility, then download and install the latest drivers from the NVIDIA website.
- **Performance issues:** Check GPU temperatures using monitoring software. Ensure your PC case has good airflow. Verify that your power supply meets the recommended wattage.
- **System instability:** Ensure your operating system is up to date. Check for any conflicting software or background processes.

For more detailed troubleshooting or persistent issues, please refer to the ZOTAC support website.

6. SPECIFICATIONS

Specification	Value
GPU	NVIDIA GeForce RTX 3070 Ti

Specification	Value
CUDA Cores	6144
Video Memory	8GB GDDR6X
Memory Bus	256-bit
Engine Boost Clock	1890 MHz
Memory Clock	19.0 Gbps
PCI Express	4.0
Max Screen Resolution	7680x4320
Power Connectors	2 x 8-pin, 1 x 6-pin
Recommended PSU	750-watt
Max Power Consumption	310-watt
Dimensions (Length)	355.9mm (14in)
Dimensions (Height)	145.7mm (5.7in)
Dimensions (Width)	3 slot (59.7mm / 2.4in)
Item Weight	6.56 pounds

7. WHAT'S IN THE BOX

The following items are included with your ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo graphics card:

- ZOTAC GAMING GeForce RTX 3070 Ti AMP Extreme Holo graphics card
- ZOTAC GAMING RGB GPU Support Bracket
- 3-pin RGB Header Cable
- User Manual (this document)

ZOTAC

QUICK INSTALLATION GUIDE



Copyright© 2019 ZOTAC Technology Ltd. All Rights Reserved

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form by any means, without the express written permission of ZOTAC Technology Limited.

Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification or alteration is authorized in writing by ZOTAC Technology Limited, (2) the serial number of the product is damaged or missing, or (3) the customer does not complete the product registration within 28 days of the purchase date. Products can be registered only at www.zotac.com website.

ZOTAC TECHNOLOGY LIMITED PROVIDES THIS MANUAL 'AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ZOTAC TECHNOLOGY LIMITED BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE OR DATA, INTERRUPTION OF BUSINESS AND THE LIKE), EVEN IF PC PARTNER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ARISING FROM ANY DEFECT OR ERROR IN THIS MANUAL OR PRODUCT.

SPECIFICATIONS AND INFORMATION CONTAINED IN THIS MANUAL ARE FURNISHED FOR INFORMATIONAL USE ONLY, AND ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE, AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY ZOTAC TECHNOLOGY LIMITED. ZOTAC TECHNOLOGY LIMITED ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR INACCURACIES THAT MAY APPEAR IN THIS MANUAL, INCLUDING THE PRODUCTS AND SOFTWARE DESCRIBED IN IT.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owner's benefit, without intent to infringe.

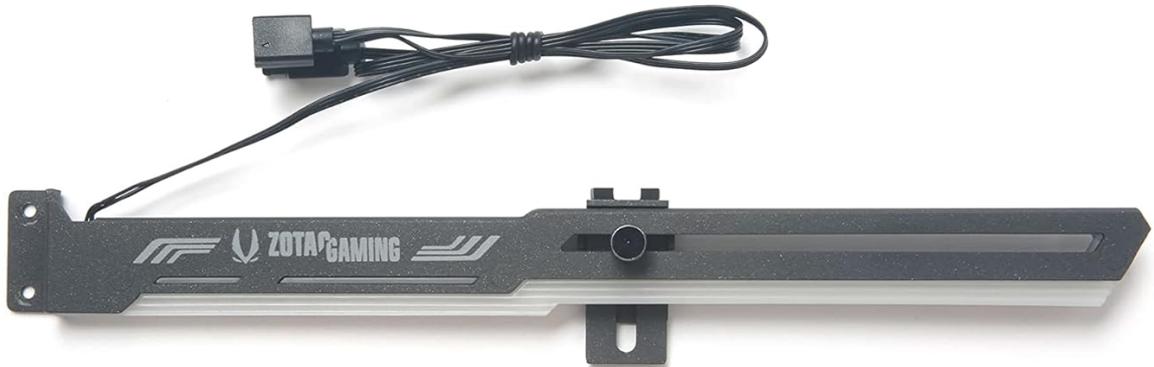


Figure 6: Contents of the ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo retail box.



Please read the installation guide on how to use the RGB GPU Support Bracket before use

Figure 7: The included ZOTAC Gaming RGB GPU Support Bracket.

8. WARRANTY AND SUPPORT

For customer service, technical support, or general inquiries regarding your ZOTAC Gaming GeForce RTX 3070 Ti AMP Extreme Holo graphics card, please visit the dedicated support page on the official ZOTAC website.

Official Support Website: www.zotac.com/support

Please retain your proof of purchase for warranty claims. Warranty terms and conditions are available on the ZOTAC support website.