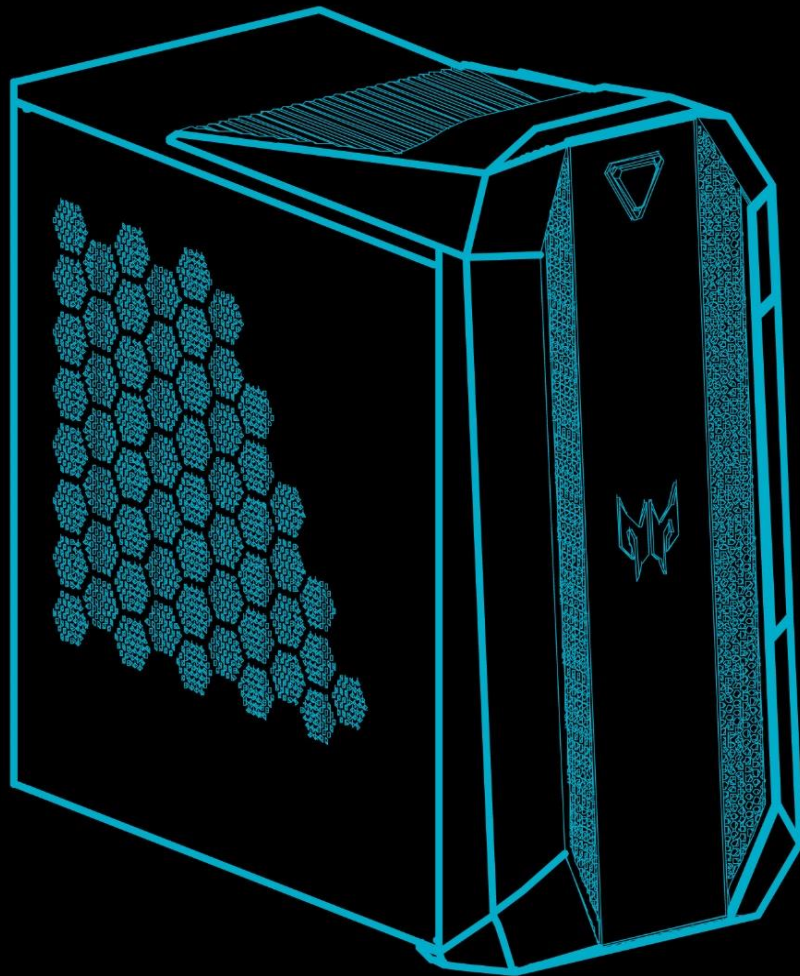




PREDATOR ORION 3000

USER'S MANUAL





Important

This manual contains proprietary information that is protected by copyright laws. The information contained in this manual is subject to change without notice. Some features described in this manual may not be supported depending on the Operating System version. Images provided herein are for reference only and may contain information or features that do not apply to your computer. Acer Group shall not be liable for technical or editorial errors or omissions contained in this manual.

Register your Predator product

If your new device runs on Windows OS, you may have had your product registered automatically while you start up your device with Windows OS.

Log in at <http://www.acer.com/myproducts> with the email address you registered for Windows OS to review your product record. (Reset your password if you do not know it.) If the record is not found, please follow the steps below to register.

1. Ensure you are connected to the Internet.
2. Go to www.acer.com/register-product.
3. Sign in or sign up for an Acer ID.
4. Enter S/N or SNID of your device to register it.

Model number: _____

Serial number: _____

Date of purchase: _____

Place of purchase: _____



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.



Table of Contents

Installation precautions.....	1
ESD precautions	1
Required tools.....	1
Pre-installation instructions	2
Post-installation instructions	2
System Cover.....	3
Removing the left side system cover....	3
Installing the left side system cover.....	4
Removing the left side transparent cover	5
Installing the left side transparent cover	6
Hard drives	7
Removing the 3.5-inch hard drives	7
Installing the 3.5-inch hard drives	9
Memory	11
Memory configuration guidelines	11
Removing a memory module.....	12
Installing a memory module.....	13

Graphic board	14
Removing the Graphics board	14
Installing the Graphics board	16
M.2 SSD modules.....	18
Removing the M.2 SSD1 module	18
Installing the M.2 SSD1 module	20
Removing the M.2 SSD2 module	22
Installing the M.2 SSD2 module	24
PredatorSense Features	27
Lighting.....	28
Fan Control	29
Monitoring.....	30



Upgrading your Computer

In this section, you will find:

- Instructions on how to replace a hardware component



UPGRADING YOUR COMPUTER

Installation precautions

Before you install any computer component, we recommend that you read the following sections. These sections contain important ESD precautions along with pre-installation and post-installation instructions.

ESD precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other components. Always observe the following precautions before you install a computer component:

1. Do not remove a component from its protective packaging until you are ready to install it.
2. Wear a wrist grounding strap and attach it to a metal part of the computer before handling components. If a wrist strap is not available, maintain contact with the computer throughout any procedure requiring ESD protection.

Required tools

In performing the component replacement process, you will need the following tools:

- Philips screwdriver
- Hex screwdriver
- Flat screwdriver
- Scissors



Note

The screws for the different components vary in size. During the disassembly process, group the screws with their corresponding components to avoid mismatches when putting back the components.



Pre-installation instructions

Always observe the following before you install any component:

1. Make sure that the ODD and card reader slot is empty.
2. Turn off the power to the computer and all peripherals.
3. Unplug the power cord from the computer.
4. Unplug the network cable and all connected peripheral devices from the computer.
5. Place the computer on a flat, steady surface.



Warning

Hot surface. Allow the computer to cool off first before handling.

6. Open your computer according to the instructions on [removing the left side system cover on page 3](#).
7. See the following sections for specific instructions on the component you wish to install.



Warning

Not turning off the computer properly before you start installing the components may cause serious damage. Do not attempt the procedures described in the following sections unless you are a qualified service technician.

Post-installation instructions

Observe the following after installing a computer component:

1. See to it that the components are installed according to the step-by-step instructions in their respective sections.
2. Replace any expansion boards or peripherals that you removed earlier.
3. Replace the system covers. See [installing the left side system cover on page 4](#).
4. Connect the necessary cables.
5. Turn on your computer.



System Cover

Removing the left side system cover

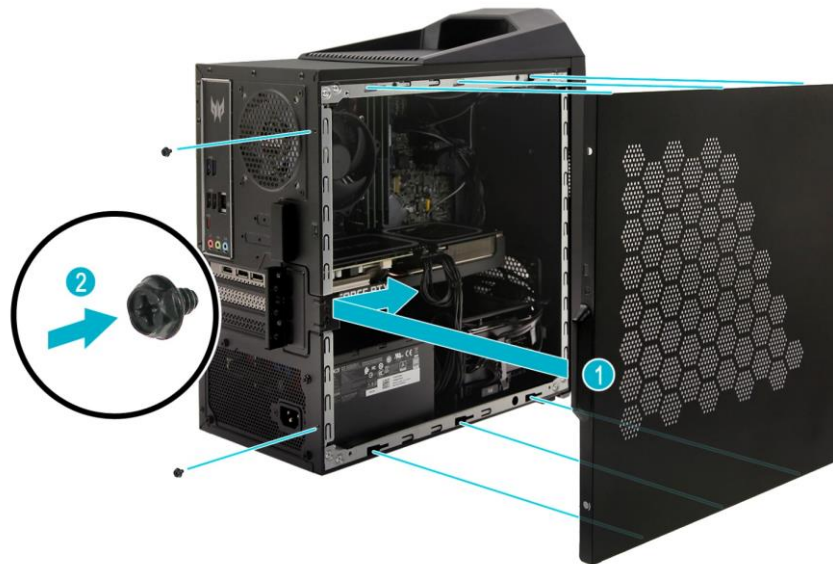
1. Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the [Pre-installation instructions on page 2.](#)
2. Remove the two screws that secure the left side system cover to the computer [1].
3. Slide the cover toward the back of the computer and pull away from the side of the computer [2].



4. Set the cover aside for re-installation later.

Installing the left side system cover

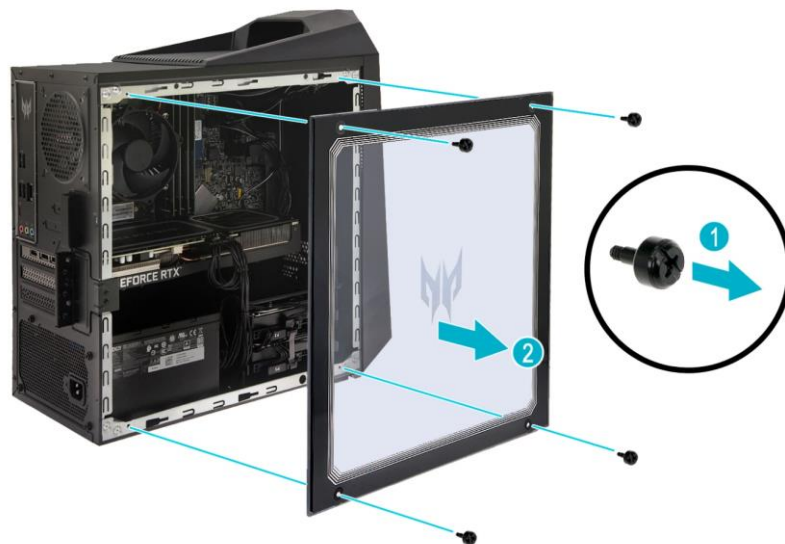
1. Align the cover to the sides of the computer and slide the cover toward the front of the computer **[1]**.
2. Secure the cover with two screws **[2]**.



3. Observe the Post-installation instructions on page 2.

Removing the left side transparent cover

1. Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the [Pre-installation instructions on page 2](#).
2. Remove the four screws that secure the left side transparent cover to the computer [1].
3. Gently detach the cover from the side of the computer [2].



4. Set the cover aside for re-installation later.

Installing the left side transparent cover

1. Align the cover to the sides of the computer **(1)**.
2. Secure the cover with four screws **(2)**.



3. Observe the Post-installation instructions on page 2.

Hard drives

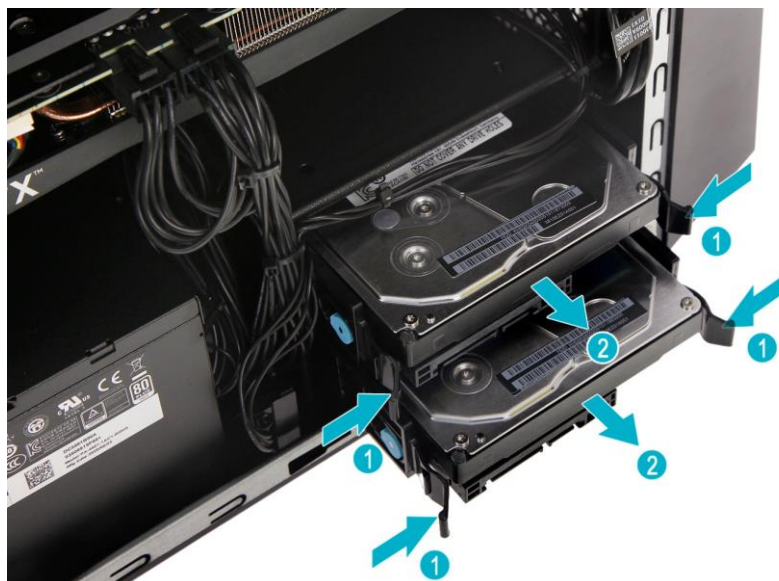
The computer supports installation of two 3.5-inch SATA hard drives in the internal HDD cage.

Removing the 3.5-inch hard drives

1. Perform the [Pre-installation instructions on page 2](#).
2. Disconnect the power and data cables from the hard drives.



3. Remove the hard drives from the chassis.



8 - UPGRADING YOUR COMPUTER

4. Pull both sides of the HDD carrier (1) then remove the hard drive (2).

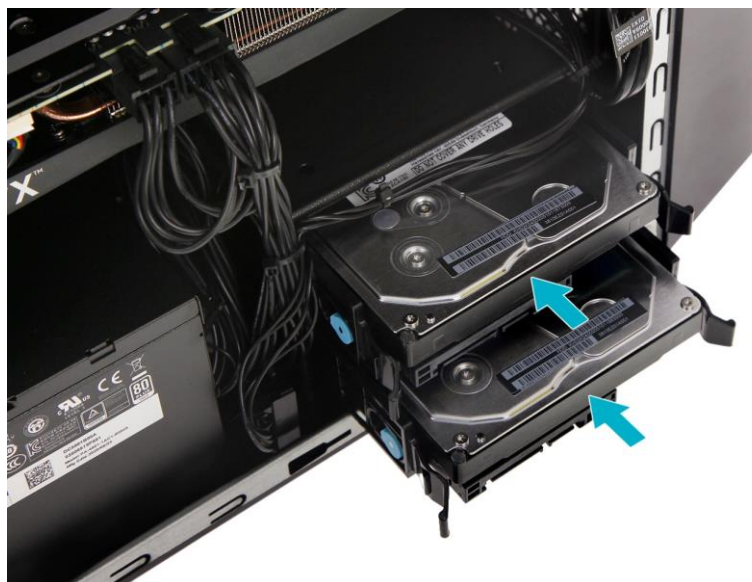


Installing the 3.5-inch hard drives

1. Remove the new hard drive from their packaging.
2. Place the hard drive into the carrier (1) and reinsert the retaining screws into the hard drive (2).



3. Insert the hard drives into the chassis.



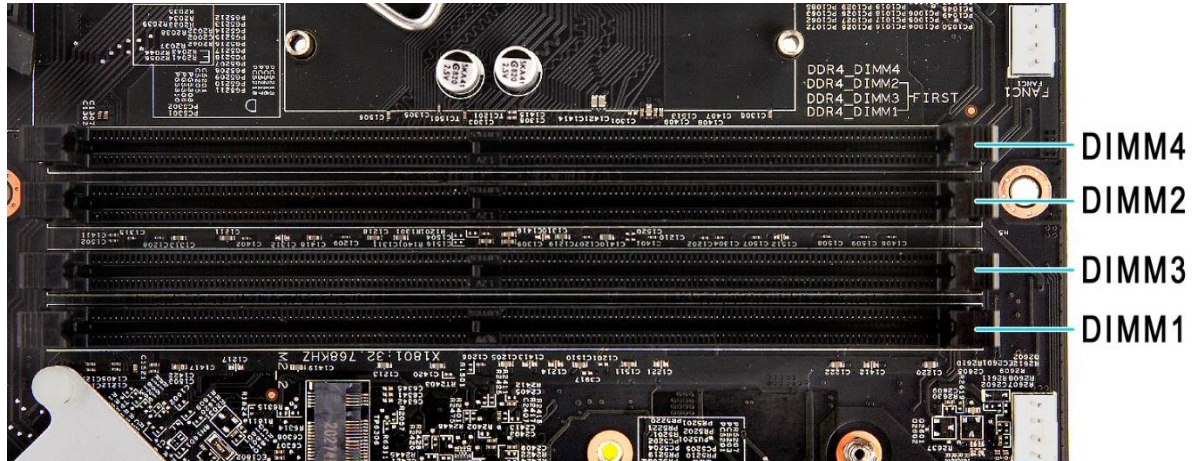
4. Connect the power and data cables to the hard drives.



5. Observe the Post-installation instructions on page 2.

Memory

The computer has four DDR4 U-DIMM slots that support up to 64 GB maximum system memory.



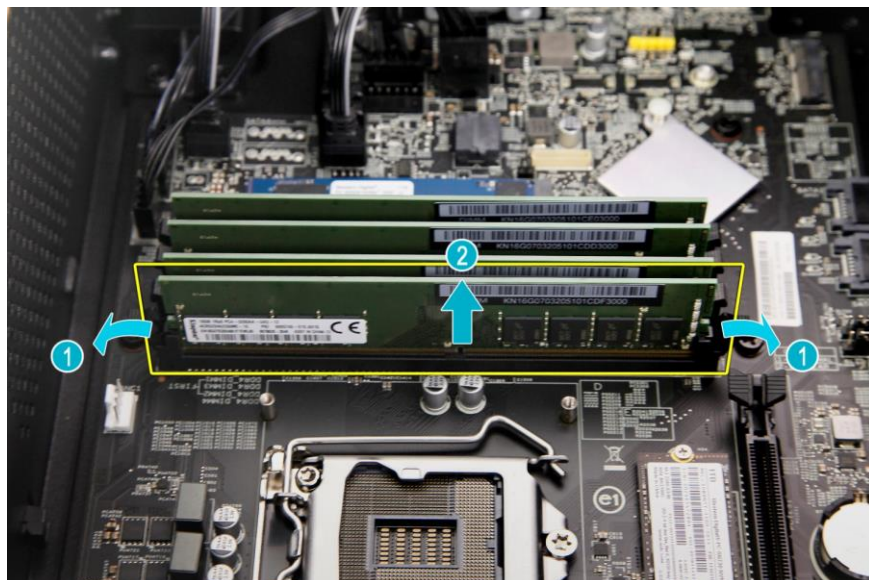
Memory configuration guidelines

- To ensure data integrity, use only Acer-approved DDR4 3200 MHz type memory modules.
- Memory modules must be installed starting with DIMM1 slot.
- Always handle memory modules by its edges.
- When installing memory modules, populate the DIMM slots according to the table below.

Size	DIMM1	DIMM2	DIMM3	DIMM4
4GB	4GB	N/A	N/A	N/A
8GB	4GB	4GB	N/A	N/A
8GB	8GB	N/A	N/A	N/A
16GB	4GB	4GB	4GB	4GB
16GB	8GB	8GB	N/A	N/A
16GB	16GB	N/A	N/A	N/A
32GB	8GB	8GB	8GB	8GB
32GB	16GB	16GB	N/A	N/A
48GB	16GB	8GB	16GB	8GB
64GB	16GB	16GB	16GB	16GB

Removing a memory module

1. Perform the [Pre-installation instructions on page 2](#).
2. Remove the graphics board. See [Removing the graphics board on page 14](#).
3. Press outward the holding clips on both sides of the DIMM slot outward to release the memory module (1).
4. Gently pull the memory module upward to remove it from the DIMM slot (2).



5. Repeat steps 3~4 to remove the other memory modules.

Installing a memory module



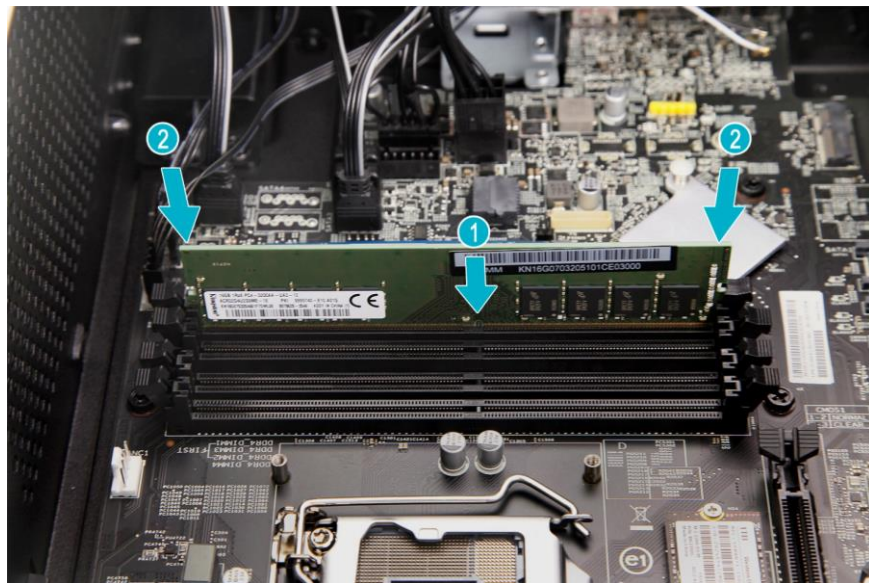
Note

DIMM slots on the mainboard must be installed only in certain configurations. Numbers next to DIMM slots correspond to installation sequence.

Be sure to install the memory module in DIMM1 slot followed by DIMM2 slot.

1. Select an empty DIMM slot.
2. Remove the new memory module from its packaging, handling it by the edges.
3. Align then insert the memory module into the DIMM slot [1].
4. Insert the memory to the slot until the retaining clips snap inward [2].

The module is keyed so it can only be inserted in one direction. If the module does not fit, make sure that the notch in the module lines up with the tab in the memory slot.



5. Repeat steps 1~4 to install the other memory modules.
6. Replace the graphics board. See [Installing the graphics board on page 16](#).
7. Observe the [Post-installation instructions on page 2](#).



Graphic board

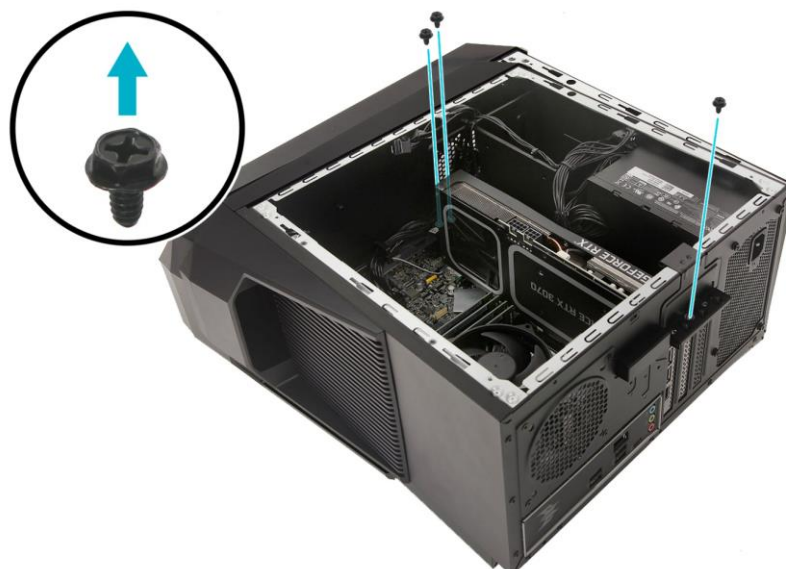
The computer contains one or two Graphic boards installed in the PCIE x16 slots. The detail configuration will be differed by different models.

Removing the Graphics board

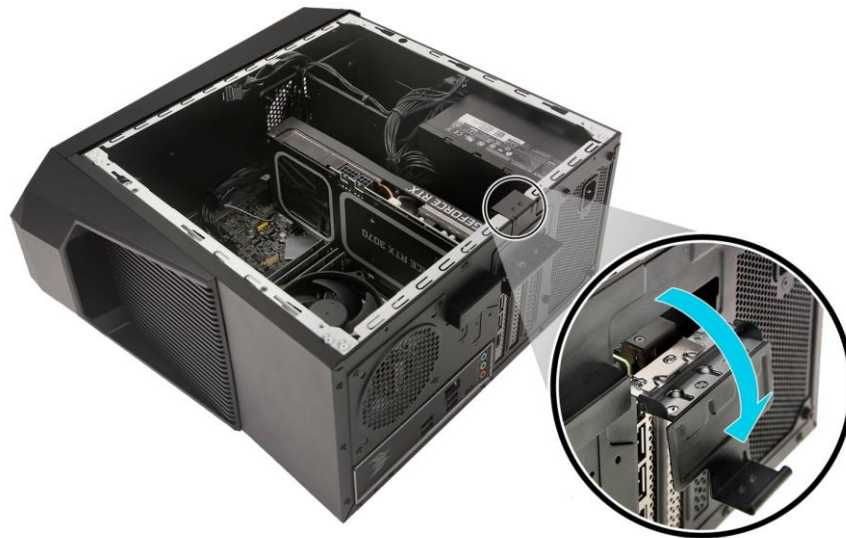
1. Perform the [Pre-installation instructions on page 2.](#)
2. Disconnect the power cables from the graphics board.



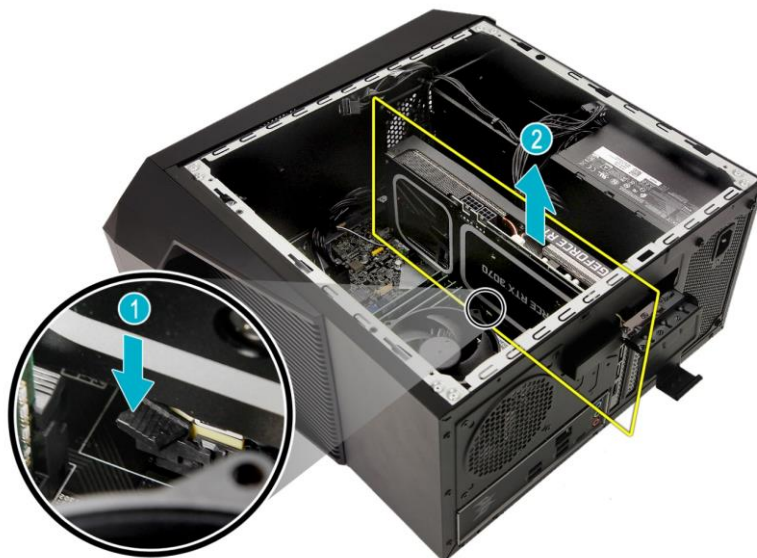
3. Remove the three screws that secure the graphics board to the chassis.



4. Unlatch the metal clip that secure the graphics board to the chassis.



5. Release the latch that secures the graphics board to the mainboard (1).
6. Detach the graphics board from the PCIe x16 slot (2).



Installing the Graphics board

1. Remove the new graphics board from its packaging.
2. Insert the graphics boards into the PCIE x16 slot and press it down until it latches into place.

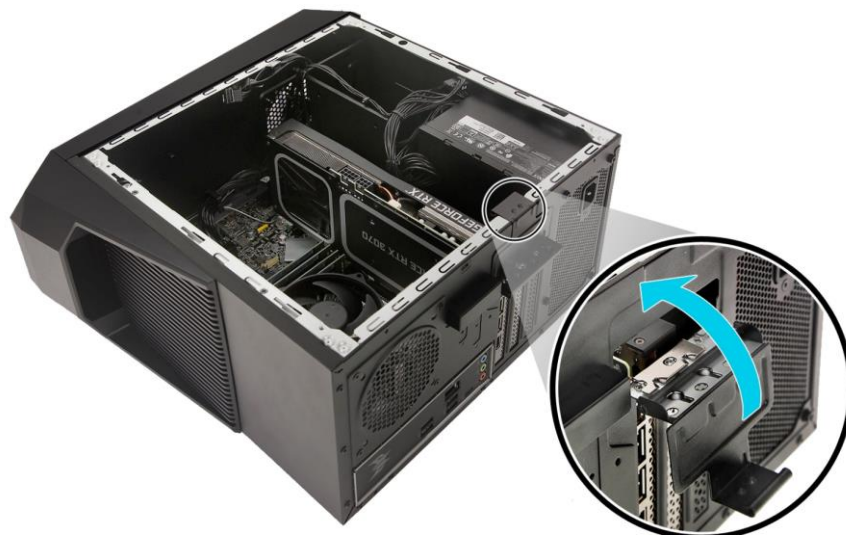


Note

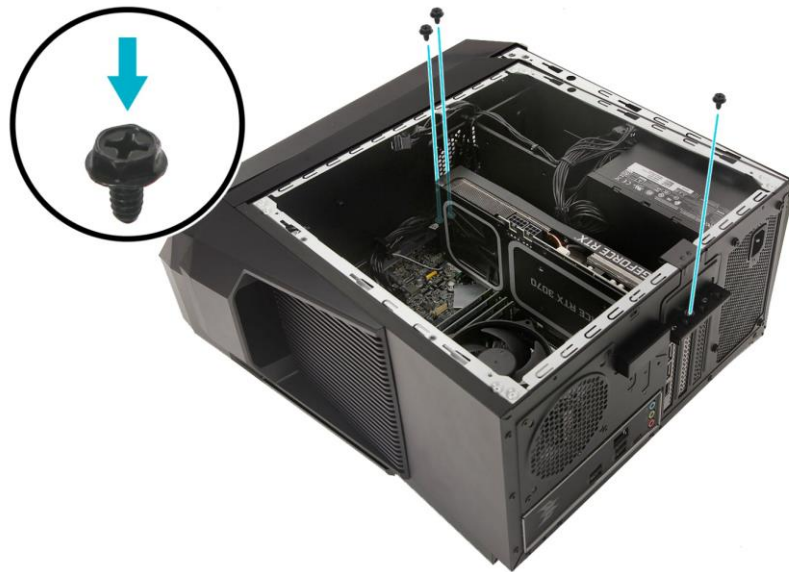
To replace/upgrade graphic board, please check the specification of graphic board & power supply first in order to make sure the graphic board and power supply could work.



3. Press the metal clip to secure the graphics board bracket.



4. Secure the graphics board to the chassis using three screws.



5. Connect the power cables to the graphics board.



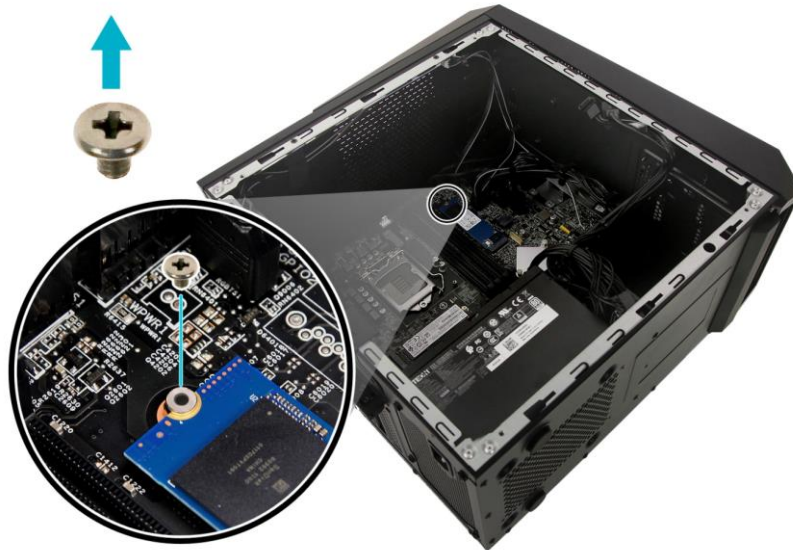
6. Observe the [Post-installation instructions on page 2.](#)

M.2 SSD modules

The computer contains two M.2 SSD modules installed in the M.2 PCIE slots.

Removing the M.2 SSD1 module

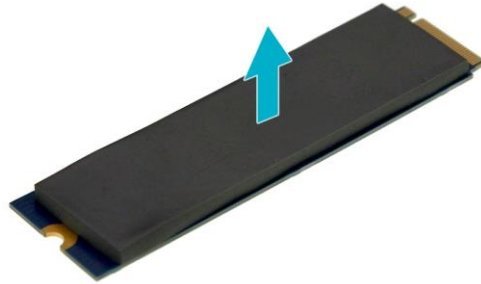
1. Perform the [Pre-installation instructions on page 2](#).
2. Remove the graphics board. See [Removing the graphics board on page 14](#).
3. Remove the screw that secures the M.2 SSD1 module from the mainboard.



4. Detach the M.2 SSD1 module from the mainboard.

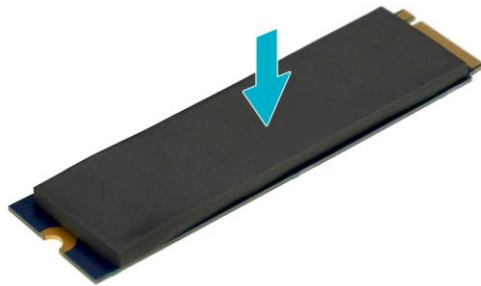


5. Remove the thermal pad from the SSD module.



Installing the M.2 SSD1 module

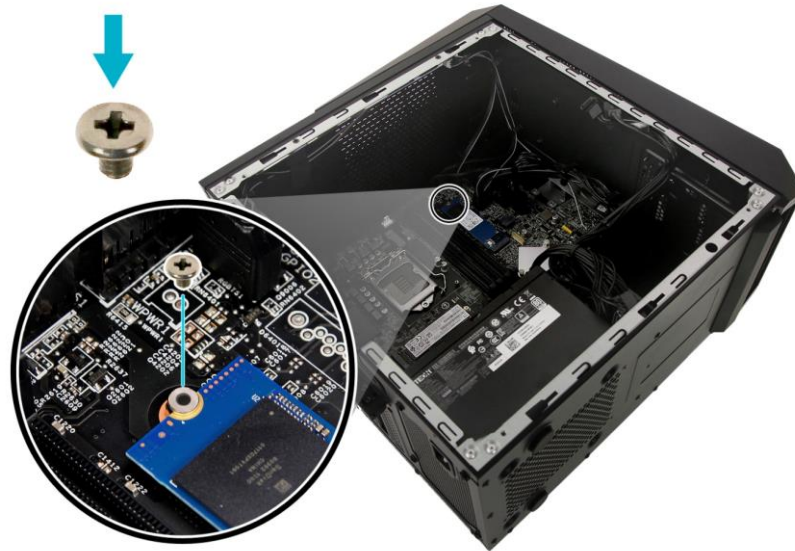
1. Remove the new M.2 SSD module from its packaging.
2. Place a thermal pad into the SSD module.



3. Insert the M.2 SSD1 module into its slot in the mainboard.



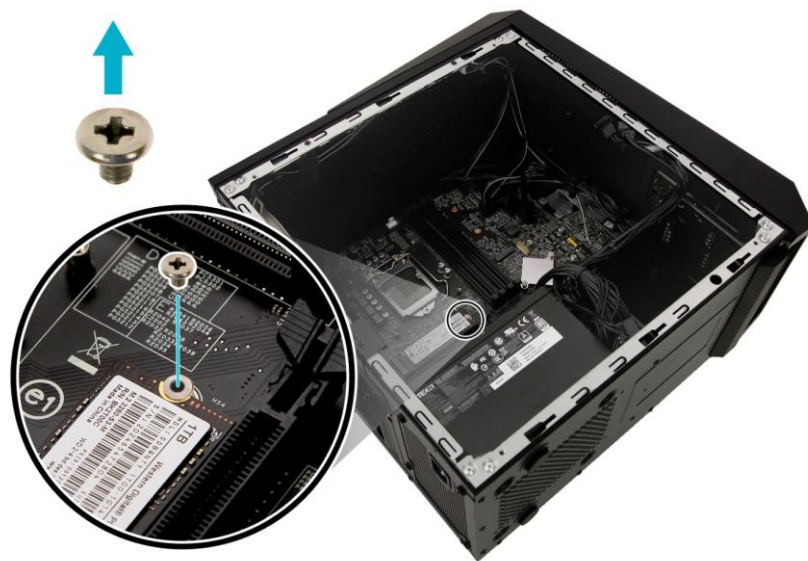
4. Secure the M.2 SSD1 module to the mainboard using one screw.



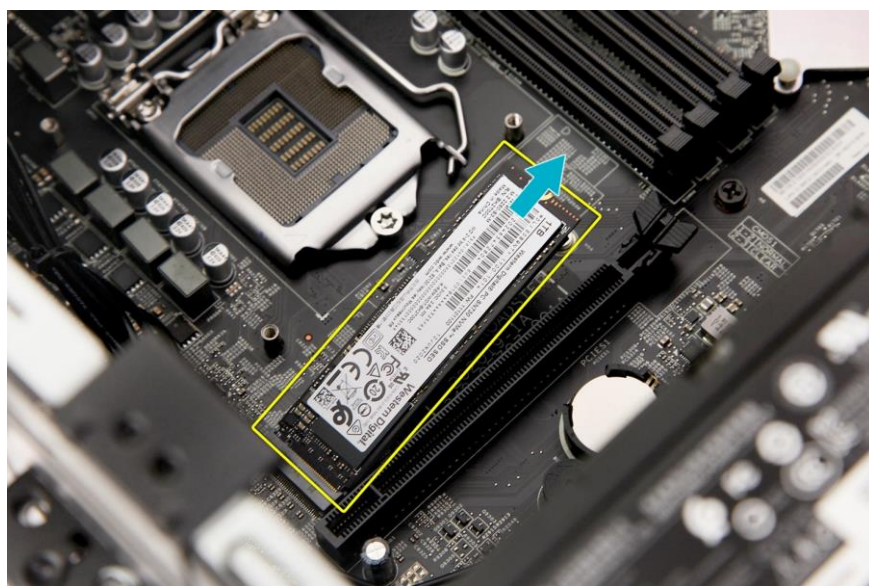
5. Replace the graphics board. See [Installing the graphics board on page 16.](#)
6. Observe the [Post-installation instructions on page 2.](#)

Removing the M.2 SSD2 module

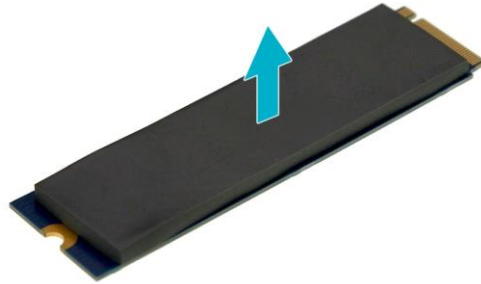
1. Perform the [Pre-installation instructions on page 2](#).
2. Remove the graphics board. See [Removing the graphics board on page 14](#).
3. Remove the screw that secures the M.2 SSD2 module from the mainboard.



4. Detach the M.2 SSD2 module from the mainboard.

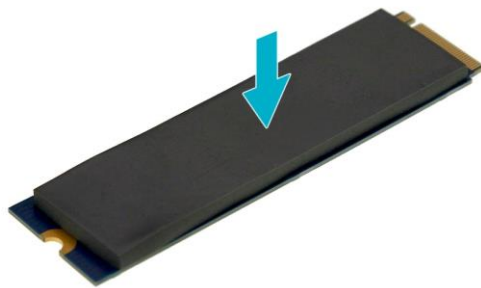


5. Remove the thermal pad from the SSD module.

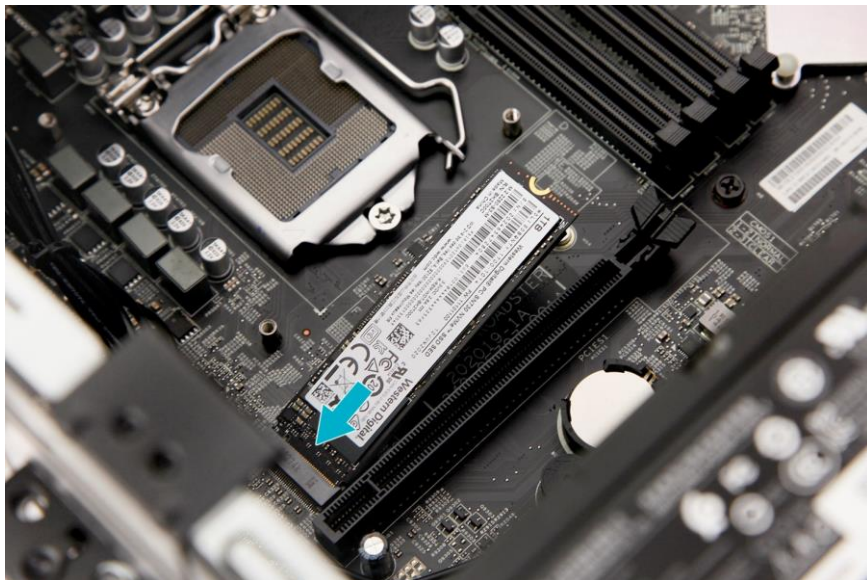


Installing the M.2 SSD2 module

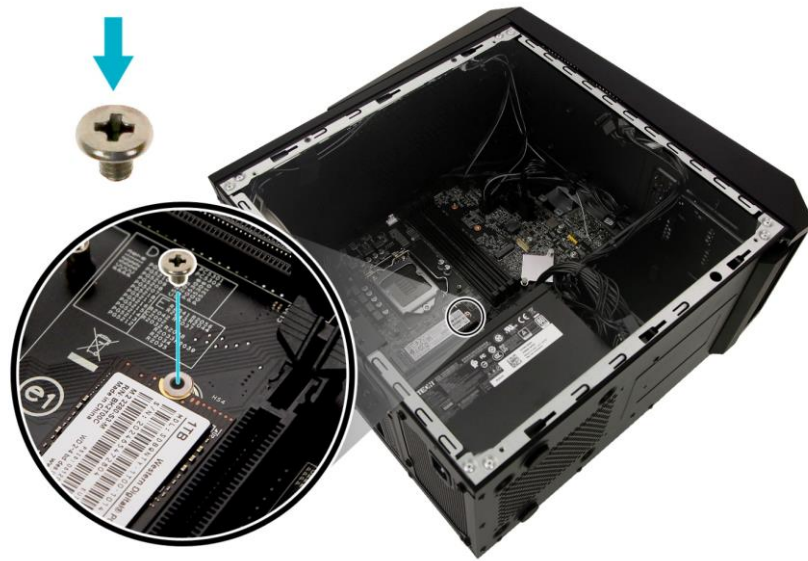
1. Remove the new M.2 SSD module from its packaging.
2. Place a thermal pad into the SSD module.



3. Insert the M.2 SSD2 module into its slot in the mainboard.



4. Secure the M.2 SSD2 module to the mainboard using one screw.



5. Replace the graphics board. See [Installing the graphics board on page 16.](#)
6. Observe the [Post-installation instructions on page 2.](#)

PredatorSense

In this section, you will find:

- Information on how to use the Predator Sense software



PREDATOR SENSE

PredatorSense (DT) V3.0 is an Acer proprietary utility that can be used to enhance the user experience of Gaming products on Microsoft Windows 10.

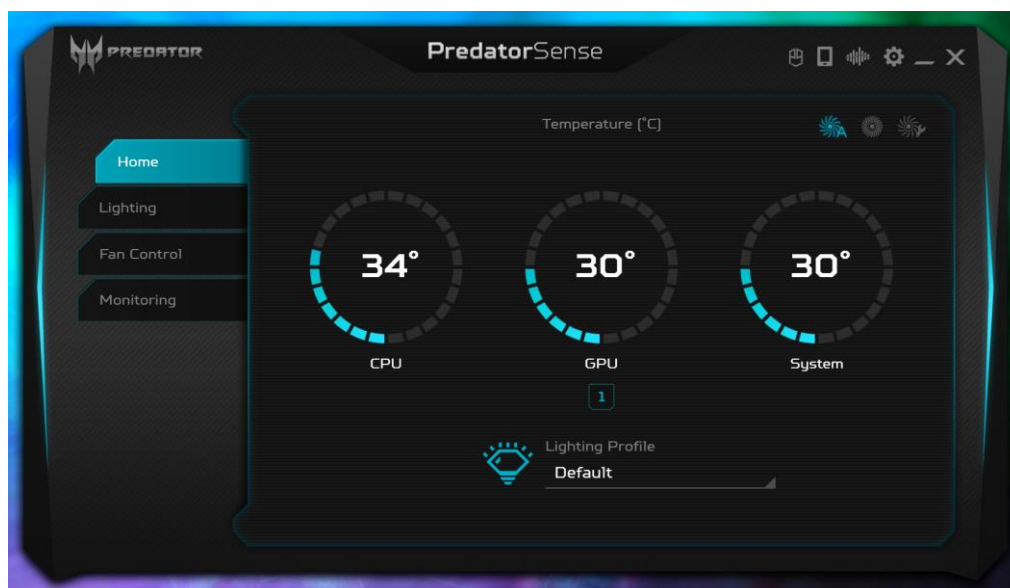
The central idea of this utility is to provide a user interface to easily control fan speed, RGB lighting effects and also monitor processor, GPU and system performance.

PredatorSense Features

- Lighting (RGB Lighting Effects)
- Fan Control
- Monitoring (System Information Dashboard)

To set up the PredatorSense application (Windows 10):

1. From the Start menu, select **All apps**.
2. Select **Acer**.
3. Select PredatorSense.

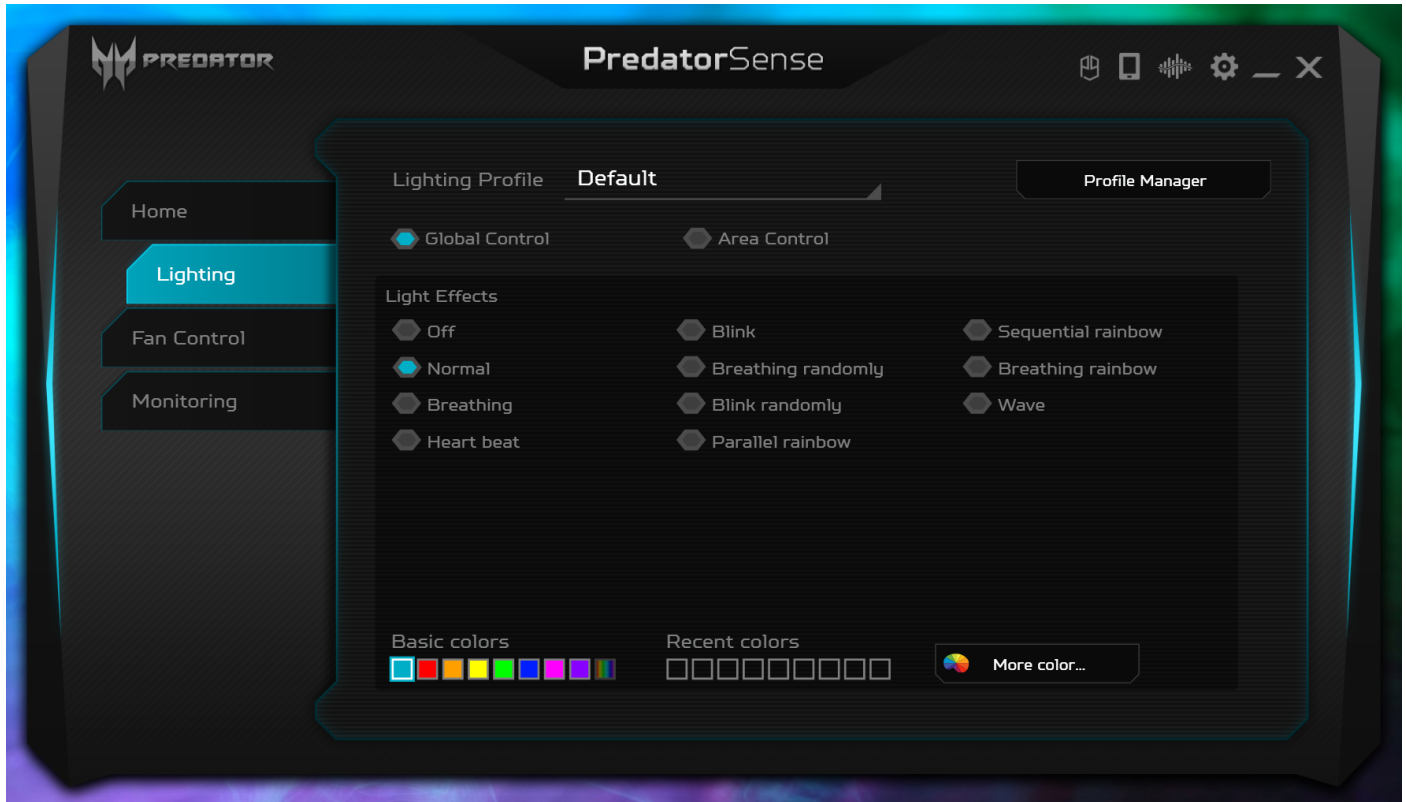


Alternatively, you can double-click the PredatorSense desktop shortcut to run the application.



Lighting

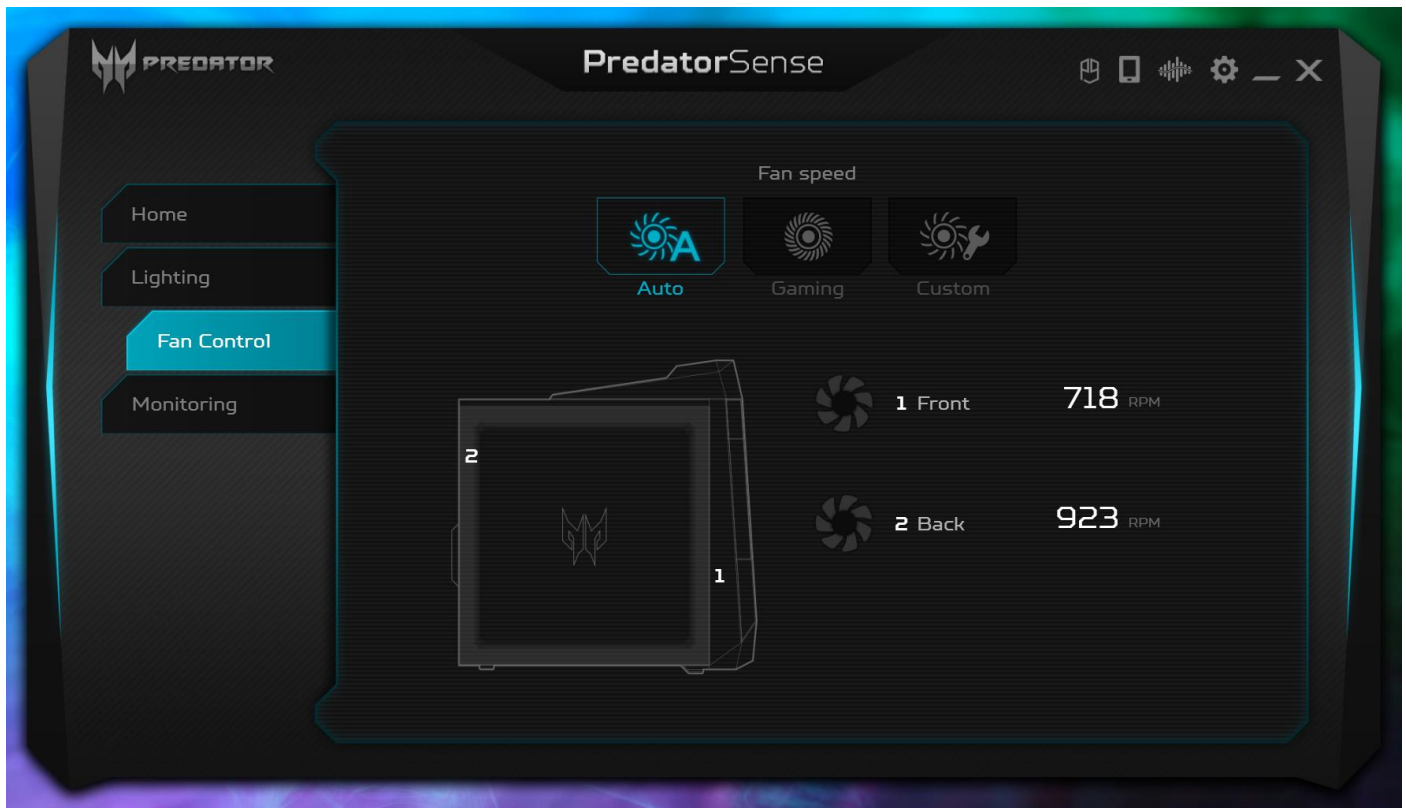
Select the Lighting tab to configure the system's lighting options.



Category	Description
Lighting Profile	Shows the current lighting profile used by the system. Load a previously saved lighting profile by choosing from the drop down list.
Profile Manager	Add or remove a user's custom lighting profile.
Global Control	Set up the lighting effects configuration as a theme for the whole system.
Area Control	Customize the lighting effects configuration of the Front light bar, Front Fan and Rear Fan.

Fan Control

Select the Fan Control tab to adjust the fan speed.

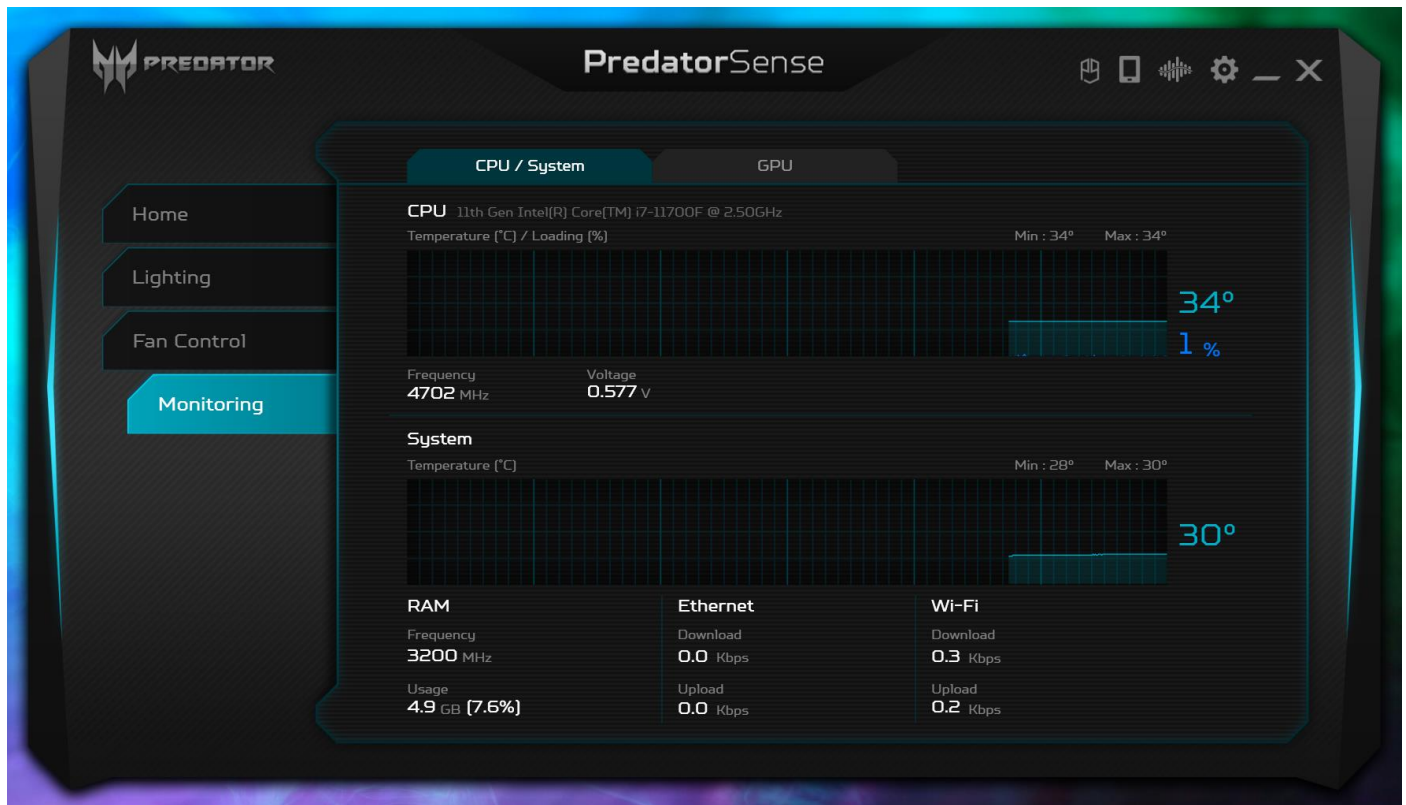


Category	Description
Auto	Allows system to control fan speed according to actual system usage.
Gaming	Configure fan speed for gaming use.
Custom	Manually adjust fan speed to desired RPM.



Monitoring

Select the Monitoring tab to view CPU/System and GPU performance.



Category	Description
CPU/System	Displays CPU and System temperature and loading. Also displays RAM, Wi-Fi and LAN usage.
GPU	Displays GPU System temperature and loading.