

ZOTAC  
**ZBOX**  
*nano*



ZOTAC.COM



USER'S MANUAL

# ZOTAC ZBOX nano

## User's Manual



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Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

### **CAUTION:**

Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

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## Product specifications

### Processor

- Intel Processor N3160 (quad core, 1.6 GHz up to 2.24 GHz)

### Onboard graphics

- Intel HD Graphics
- Intel Quick Sync Video
- Intel Clear Video HD technology
- Native 4K support (H.265, H.264 decode)
- HDMI 1.4b (max resolution: 3840×2160 @30Hz)
- DP 1.1a (max resolution: 3840×2160 @30Hz)
- VGA (max resolution: 1920×1080 @60Hz)

### Memory support

- 2 204-pin DDR3L-1600 SO-DIMM slots
- Up to 8 GB of memory

### USB ports

- 2 USB 3.0 ports
- 1 USB 3.0 Type-C port
- 2 USB 2.0 ports

### Storage support

- SATA 6.0 Gb/s transfer rates
- Supports one 2.5-inch SATA HDD/SSD (9.5mm max height)

### Network support

- Dual Gigabit (10/100/1000Mbps) LAN
- IEEE 802.3 compatible

### Wi-Fi support

- 802.11ac Wi-Fi (dual-band)
- Bluetooth 4.0

### Audio

- Digital 8 Channel Audio (LPCM/bitstream via HDMI)
- SPDIF output

### Operating System support

- Windows 8.1 64bit, Windows 10 32bit/64bit (Preinstalled Windows 10 Home in S mode for Windows version)

### Product Dimensions

- 127.8mm x 126.8mm x 56.8mm

## Safety information

Your ZOTAC ZBOX nano is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

### Setting up your system

- ❖ Read and follow all instructions in the documentation before operating your system.
- ❖ Do not use this product near water or a heat source such as a radiator.
- ❖ Set up the system on a stable surface.
- ❖ Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- ❖ Use this product in environments with ambient temperatures between 0°C and 35°C.
  - ☞ If you use an extension cord, please use the UL listed cord and make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

### Care during use

- ❖ Do not walk on the power cord or allow anything to rest on it.
- ❖ Do not spill water or any other liquids on your system.
- ❖ When the system is turned off, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- ❖ If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - The power cord or plug is damaged.
  - Liquid has been spilled into the system.
  - The system does not function properly even if you follow the operating instructions.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.

## Welcome

Congratulations on your purchase of the ZOTAC ZBOX nano mini-PC. The following illustration displays the package contents of your new ZOTAC ZBOX nano. Please contact your retailer if any of the below items are damaged or missed.

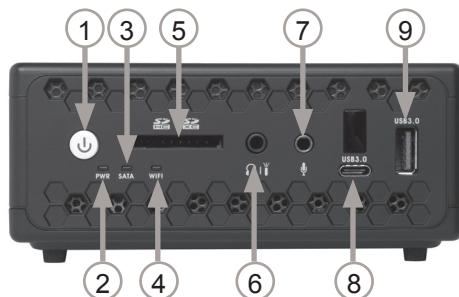
### Package contents

- 1 x ZOTAC ZBOX nano
- 1 x ZOTAC VESA mount
- 4 x Mount screws
- 1 x AC Adapter
- 1 x Power Cord
- 1 x Headphone/SPDIF adapter
- 1 x WiFi antenna
- 1 x User Manual
- 1 x Quick Start Guide
- 1 x Support DVD



## Getting to know your ZOTAC ZBOX nano

### Front view



Refer to the diagram below to identify the components on this side of the system

#### 1. Power button

The power button turns the mini-PC ON and OFF.

#### 2. Power LED

The Power LED is always ON when power is on.

#### 3. SATA status LED

The SATA LED blinks when data is being written onto or read from the SATA.

#### 4. Wi-Fi status indicator

The Wi-Fi LED is always ON when data is being transferred over Wi-Fi.

#### 5. Memory card reader

The built-in memory card reader reads SD/SDHC/SDXC cards used in devices such as digital cameras, MP3 players, mobile phones and PDAs.

#### 6. Combo analog/mini-Optical S/PDIF output

The Combo analog/mini-Optical S/PDIF output (3.5mm) is used to connect the system's audio out signal to amplified speakers or headphones. It also supports SPDIF output with the headphone/SPDIF adapter included in the package. The optical SPDIF output enables connecting the ZBOX nano to digital audio receivers and speakers for crystal clear digital audio and surround sound from compatible soundtracks.

#### 7. Microphone input

The microphone input is designed to connect a microphone for video conferencing, voice narrations or simple audio recordings.

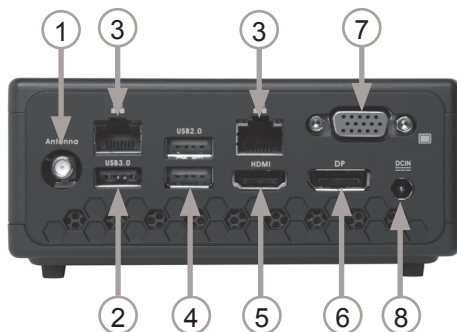
#### 8. USB 3.0 Type-C port

The USB 3.0 Type-C port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use the port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

#### 9. USB 3.0 port

The USB 3.0 port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use the ports for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

## Rear view



Refer to the diagram below to identify the components on this side of the system.

### 1. Wi-Fi antenna connector

The Wi-Fi antenna connector supports the included Wi-Fi antenna.

### 2. USB 3.0 port

The USB 3.0 port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use the ports for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

### 3. Ethernet ports

The eight-pin RJ-45 LAN port supports standard Ethernet cable for connection to a local area network (LAN) with speeds of 10/100/1000Mbps.

### 4. USB 2.0 ports

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mice, cameras and hard disk drives.

### 5. HDMI output

The HDMI (High Definition Multimedia Interface) port supports a Full-HD device such as an LCD TV or monitor to allow viewing on a larger external display.

### 6. DisplayPort

DisplayPort supports both external (box-to-box) and internal (laptop LCD panel) display connections.

### 7. VGA port

The VGA port supports connection to analog monitors and displays

### 8. Power input (DC19V)

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the mini-PC. To prevent damage to the mini-PC, always use the supplied power adapter.

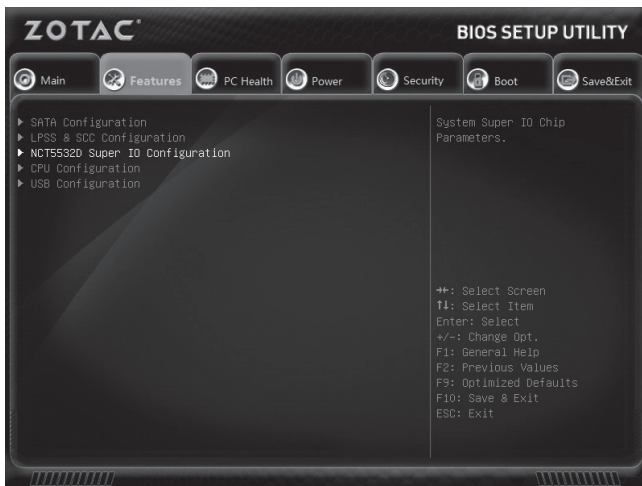
Note 1: The power adapter may become warm to hot when in use. Do not cover the adapter and keep it away from your body.

Note 2: Due to the special design for easy upgrade, some connectors are placed upside down.

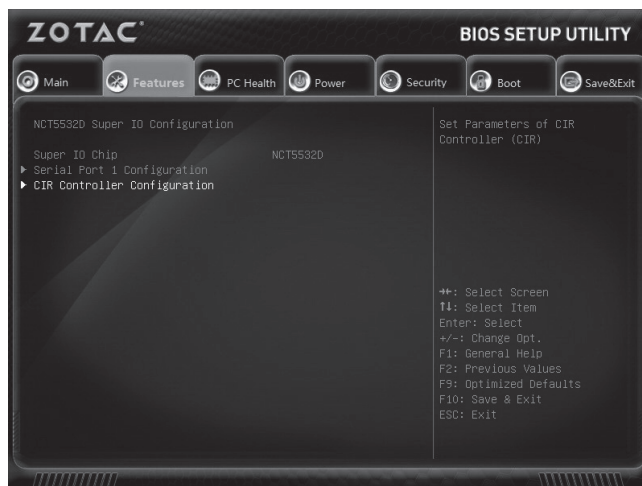


## How to disable integrated IR receiver

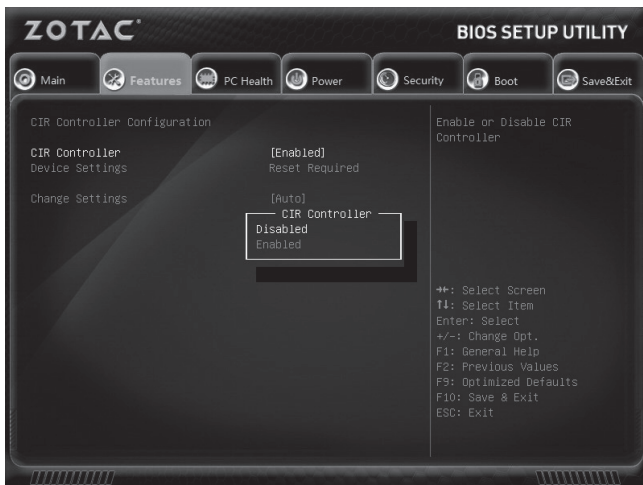
1. Turn on the ZBOX nano mini-PC, then press <Delete> to enter the BIOS SETUP UTILITY.
2. Use the arrow keys to navigate to **Features > NCT5532D Super IO Configuration**.



3. Enter **NCT5532D Super IO Configuration** and select **CIR Controller Configuration**.



4. Enter **CIR Controller** and select **Disabled**.



**Enabled:** enable the internal IR receiver (default)

**Disabled:** disable the internal IR receiver

5. Press F10 to save the configuration and exit.

## Customizing the ZOTAC ZBOX nano

Before installing hardware, please follow the instructions below to remove the cover of your ZOTAC ZBOX nano.

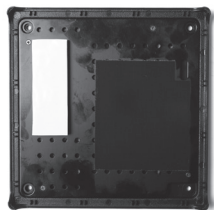
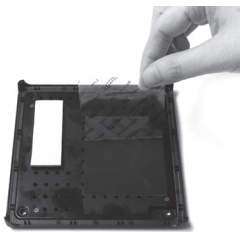
1. Remove the four screws securing the bottom cover into place.



2. Remove the bottom cover.

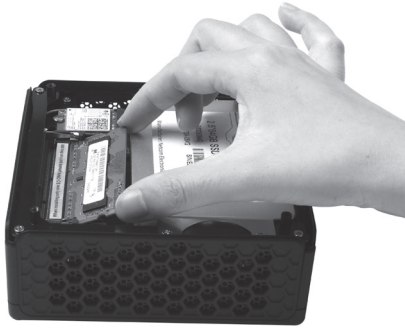


For the barebone version, please remove the heatsink foil on the bottom cover before using the miniPC.



## Installing a memory module

1. Locate the SO-DIMM memory slot and insert a SO-DIMM memory module into the slot at a 45 degree angle.



2. Gently press down on the memory module until it locks into place by the arms of the memory slot.



*Note: When installing only one SO-DIMM memory module, please insert a module into the lower slot.*

## Installing a hard disk

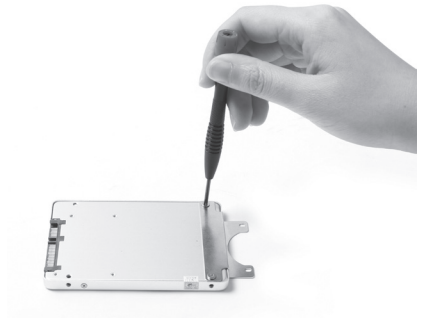
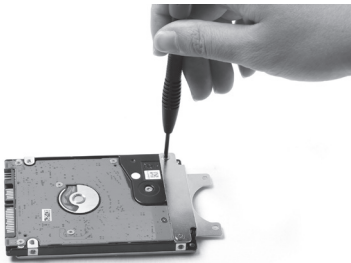
1. Locate the hard disk bracket, remove the 2 screws, and remove the hard disk bracket as shown in the image below.



2. Install the hard disk bracket onto a 2.5-inch SATA hard disk /SSD with 2 screws.

HDD:

SSD:



3. Insert the hard disk /SSD into the socket and gently slide into the connector.

HDD:



SSD:



4. Reinstall the screws for the hard disk bracket.

HDD:

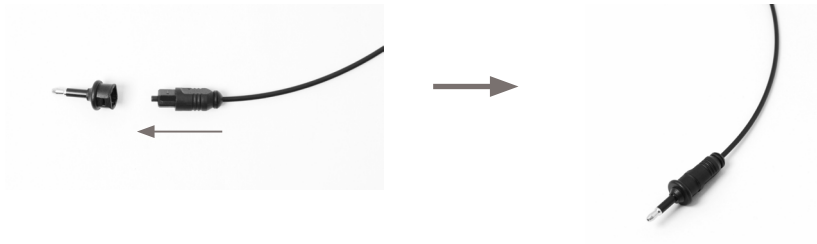


SSD:



## Connecting a S/PDIF cable

1. Connect the S/PDIF cable to the mini-Optical S/PDIF adapter.

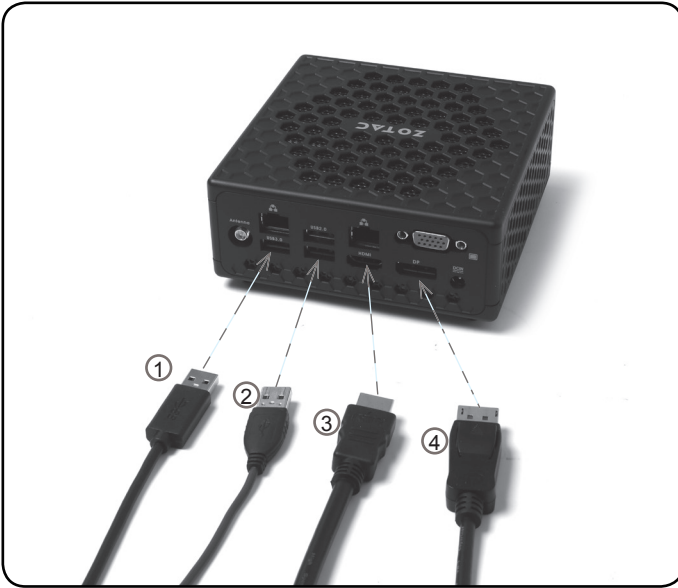


2. Locate the front panel and connect the mini-Optical S/PDIF adapter to the headphone / mini-Optical S/PDIF jack.



## Setting up the ZOTAC ZBOX nano

Please connect your peripherals before using your ZOTAC ZBOX nano.



### 1. Connecting USB 3.0 device

Connect USB 3.0 devices such as external hard drives, SSDs and flash drives to the USB 3.0 port.

### 2. Connecting to USB 2.0 devices

Connect USB devices like wired/wireless keyboards (varying with areas), mouse devices and printers to the USB ports on the system rear panel.

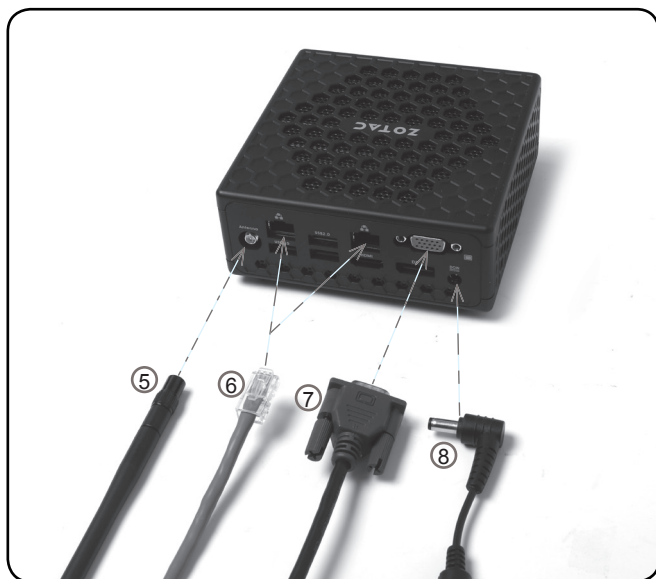
### 3. Connecting to an HDMI display

Connect one end of an HDMI cable to the HDMI port on the system rear panel and the other end to a HDMI-compatible display such as an HDTV or monitor.

### 4. Connecting a DisplayPort display

Connect the DisplayPort connector to the DP port.





### **5. Connecting the WiFi antenna module**

Connect the included WiFi antenna to the WiFi antenna connector.

### **6. Connecting to a network device**

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a network hub, switch or router.

### **7. Connecting a VGA display**

Connect the VGA connector to the VGA port.

### **8. Turning on the system**

Connect the supplied AC adapter to the DC IN jack on the system rear panel and then press the power switch on the front panel to turn on the system.

Note: When your ZOTAC ZBOX nano is not in use, unplug the power adapter or switch off the AC outlet to conserve power.

## Positioning the ZOTAC ZBOX nano

- Do not position the ZOTAC ZBOX nano where the ventilation holes are covered. To guarantee proper use, leave 4 inches (10 cm) of spacing in front of the ventilation holes.
- ZOTAC ZBOX nano mini-PC systems provide ample connectivity in a tiny form factor, please choose connectors and cables in appropriate sizes to avoid interference.

## Mounting the ZOTAC ZBOX nano to an LCD monitor

You can attach your ZOTAC ZBOX nano to the back of a VESA75/100 compliant monitor.

1. Secure the VESA mount to the LCD monitor using 4 screws (not included).  
Disclaimer: ZOTAC cannot be held liable for damages resulting from an improper installation.



2. Align the ZOTAC ZBOX nano mounting holes to the VESA mount attachment pegs. Attach the ZOTAC ZBOX nano to the VESA mount and gently press down to secure the ZBOX to the mount.



3. Connect the ZOTAC ZBOX nano to your LCD monitor with an VGA/HDMI/DP cable.



## Installing drivers and software

### Installing an operating system

The ZOTAC ZBOX nano does not ship with an operating system preinstalled. An operating system must be installed before the ZOTAC ZBOX nano can be used. The following operating systems are supported:

- Windows 8.1 64bit
- Windows 10 32bit/64bit

Follow the instructions below to install an operating system:

1. Insert disk for operating system into the optical drive.
2. Wait for the ZOTAC ZBOX nano to boot from the disk.
3. Follow the onscreen directions to install the operating system.
4. Install system drivers to gain full functionality of the ZOTAC ZBOX nano hardware and features.

### Installing system drivers

Before you can use the full features of the ZOTAC ZBOX nano, the system drivers must be installed. The following types of operating systems are supported by the ZOTAC ZBOX nano driver DVD:

- Windows 8.1 64bit
- Windows 10 32bit/64bit

Follow the instructions below to install the system drivers:

1. Insert the ZOTAC ZBOX nano driver DVD. If autorun is enabled, the driver installation main menu will show up automatically.

Note: If autorun is disabled, you can click the file Launch.EXE to bring up the driver installation main menu.

2. The following drivers are available on the DVD:

- Intel Chipset Driver
- HDA Sound Driver
- Intel Graphics Driver
- Ethernet PCI-E Driver
- Intel Management Engine
- CIR Driver
- USB Charger (optional)



**Note: If you want to use USB charger for iPhone/iPad, please install the driver at X:\Utility\Software\Usb Charger\setup.exe (X: your driver disk letter).**

- Each driver must be installed individually to ensure proper operation of the ZOTAC ZBOX.
- 3. Select the driver you want to install. The driver installer should launch.
- 4. Follow the onscreen instructions to install the drivers.
- 5. Restart the system.

## Using your ZOTAC ZBOX nano

### Configuring wireless connection

Please follow the instructions below to connect to a wireless network:

1. Double-click the crossed wireless network icon (pic) in the notification area.
2. Select the wireless network you want to connect to from the list and click Connect.
3. After connection was established, you will see “Connected”.

Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.

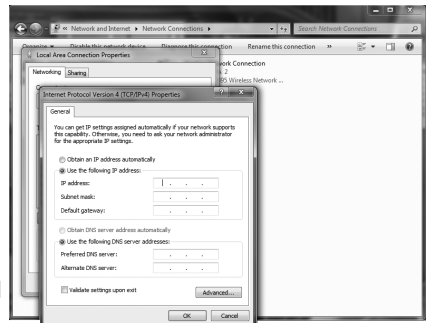
Note 2: Enter the network security key if necessary.



### Configuring wired connection

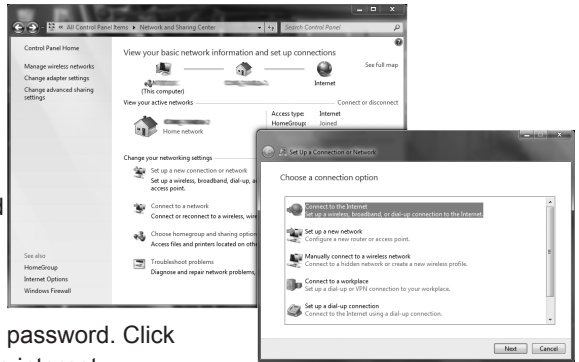
#### Using a static IP

1. Right-click the network icon in the notification area and select “Open Network Connections”.
2. Right-click “Local Area Connection” and select “Properties”.
3. Highlight “Internet Protocol (TCP/IP)” and click “Properties”.
4. Select “Use the following IP address”.
5. Enter your IP address, subnet mask and Default gateway.
6. Enter the preferred DNS server address if necessary.
7. After entering all of the related values, click “OK” to finish the configuration.



## Using a dynamic IP (PPPoE connection)

1. Repeat Step 1-3 in the previous section.
2. Select “Obtain an IP address automatically” and click “OK”.
3. Click “Create a new connection” to start the NEW Connection Wizard.
4. Click “Next”.
5. Select “Connect to the Internet” and click “Next”.
6. Select “Set up my connection manually”.
7. Select your connection type and click “Next”.
8. Enter your ISP Name and click “Next”.
9. Enter your User name and Password. Click “Next”.
10. Click “Finish” to finish the configuration.
11. Enter your user name and password. Click “Connect” to connect to the internet.



Note: Contact your internet Service Provider (ISP) if you have problems connecting to the network.

## Configuring audio output via an HDMI device

Follow the steps below to enable audio output via HDMI when connecting the ZOTAC ZBOX nano to a TV or receiver via HDMI.

1. Access the Sound settings via the system Control Panel.
2. Under Playback devices, click the display device that corresponds with your HDMI audio compatible display
3. Click the “Set Default” button in the lower right hand corner.
4. Click “OK” to exit the setup.

