# 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.

# Table of Contents

# Product specifications

**Onboard CPU**
- AMD Beema APU E2-6110 (1.5 GHz, quad core)

**Onboard graphics**
- AMD Radeon R2 Graphics
- DP1.2 (max resolution: 2560x1600 @60Hz)
- HDMI1.4a (max resolution: 1920x1200 @60Hz)
- Dual display ready
- Support AMD UVD3.0

**Memory support**
- One 204-pin DDR3L-1600/1333 SO-DIMM slot
- Up to 8 GB of memory

**USB ports**
- Two USB 3.0 ports & five USB 2.0 ports

**Storage support**
- SATA 6.0 Gb/s transfer rates
- Supports one 2.5-inch SATA HDD or SSD (support the device with max 9.5mm height)

**Network support**
- Gigabit (10/100/1000Mbps) LAN
- IEEE 802.3 compatible

**WiFi/BT support**
- Compliant with IEEE802.11ac standard
- High speed wireless connection up to 433 Mbps
- Fully qualified Bluetooth v4.0

**Audio**
- 2-channel high-definition audio
- Jack-sensing compatible

**Operating System support**
- Supports Windows 7 32bit/64bit and Windows 8.1 64bit

**Product Dimensions**
- 127mm x 127mm x 45mm

# Safety information

Your ZOTAC ZBOX is designed and tested to meet the latest standards of safety for infor-
mation 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 you operate 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 with the provided stand. Never use the system
  alone without the stand.
- ❖ 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℃ and 35℃.
- ✌ 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. The following illustration displays the package contents of your new ZOTAC ZBOX nano. If any of the below items is damaged or missed, contact your retailer.
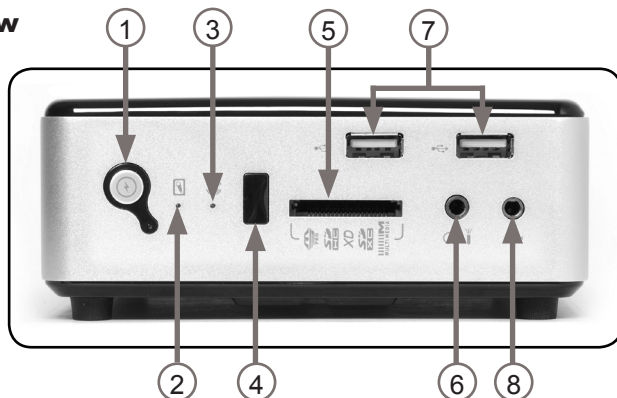
**Package contents**
- 1 x ZOTAC ZBOX nano mini-PC
- 1 x ZOTAC VESA mount
- 4 x Mount screws
- 1 x AC Adapter
- 1 x Power Cord
- 1 x Headphone/SPDIF adapter
- 1 x WiFi antenna
- 1 x User Manual
- 1 x Quick Start Guide
- 1 x Support DVD

# 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 switch**

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

**2. HDD status indicator**

The HDD status indicator shows when the hard disk is transfering data.

**3. WiFi status indicator**

The WiFi status indicator shows when the WiFi is transfering data.

**4. IR receiver**

The IR receiver is used to receive the signal from the IR remote control.

**5. Memory card slot**

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

**6. Headphone/SPDIF jack**

The headphone/SPDIF jack (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. USB 2.0 ports**

The USB (Universal Serial Bus) ports are compatible with USB devices such as keyboards, mice, cameras and hard disk drives.
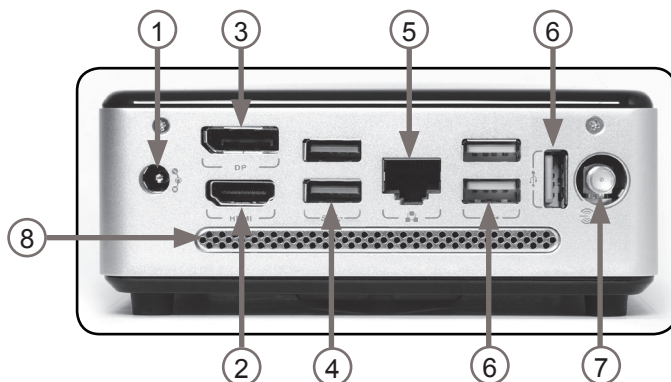
**8. Microphone jack**

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

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.

## Rear view



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

**1. 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.

**2. 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.

**3. DisplayPort**

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

**4. USB 3.0 ports**

The USB 3.0 ports support the SuperSpeed USB 3.0 devices and are 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.

**5. Ethernet port**

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.

**6. USB 2.0 ports**

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

**7. WiFi antenna connector**

The WiFi antenna connector supports WiFi antenna module.

**8. Ventilation area**

The ventilation area is designed for cooling.

# BIOS settings of specific functions

ZOTAC ZBOX nano has some specific functions which can be enabled or disabled in BIOS settings, such as LED indicator and CIR controller.

## How to disable the ring LED indicator

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 the **Features** menu and select **Backlight Control**.
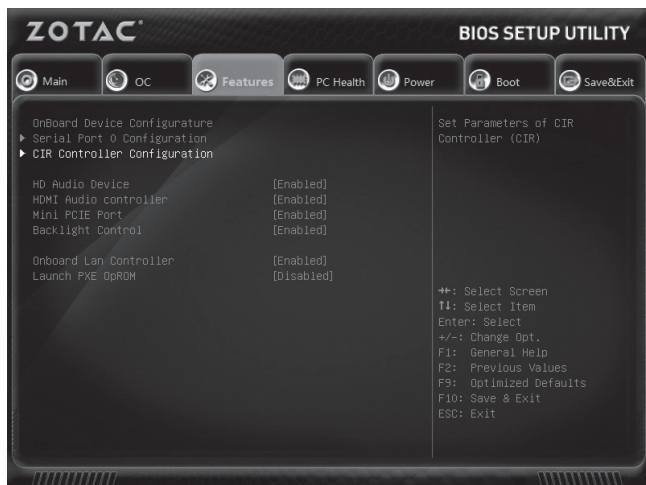3.  Press <Enter> and select **Disabled**.
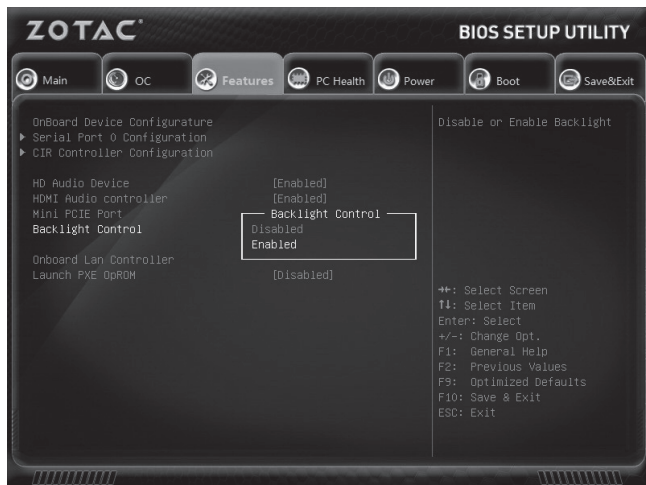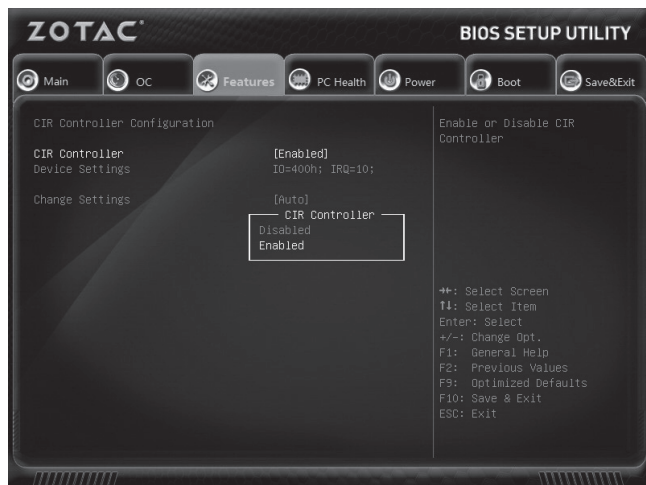


4.  Press F10 to save the configuration and exit.

## How to disable CIR controller (for internal IR receiver)

1. Use the arrow keys to navigate to **Features** > **CIR Controller Configuration**.



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



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

3. Press F10 to save the configuration and exit.

# Customizing the ZOTAC ZBOX nano

Please follow the instructions below to remove the cover of the ZOTAC ZBOX nano before customizing.

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



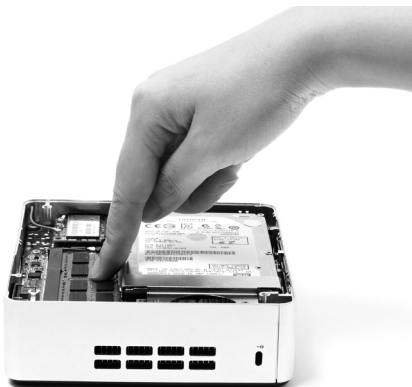2. Gently remove the cover from the side marked with words: Pull upward.

## Installing a memory module

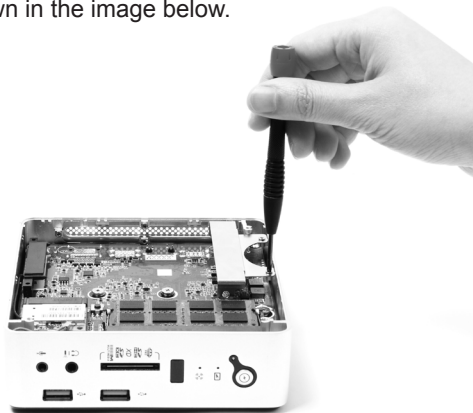1. Locate the SO-DIMM memory slot and insert a SO-DIMM memory module into the slot at a 45 degree angle.

2. Gently press down on the memory module until it locks into place by the arms of the memory slot.
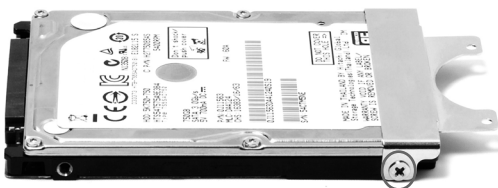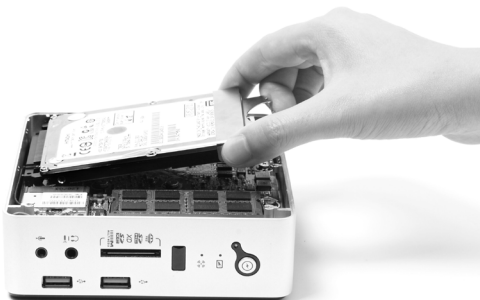
## Installing a hard disk

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

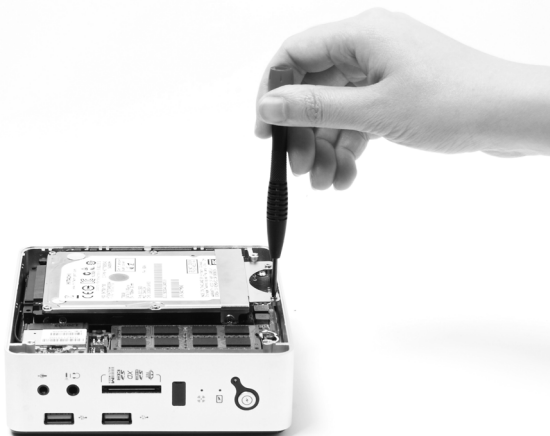2. Install the hard disk bracket to a 2.5-inch SATA hard disk with 2 screws.

3. Insert the hard disk into the socket and gently slide into the connector.
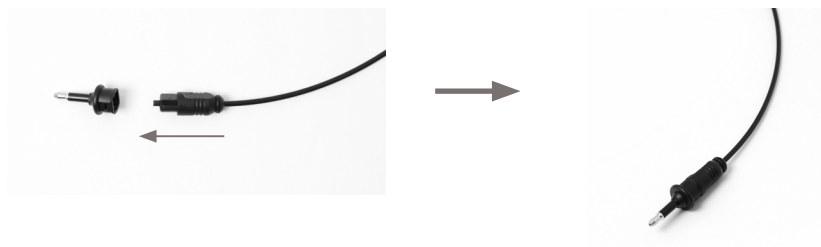
4. Reinstall the screws of the hard disk bracket.



## Connecting a SPDIF cable

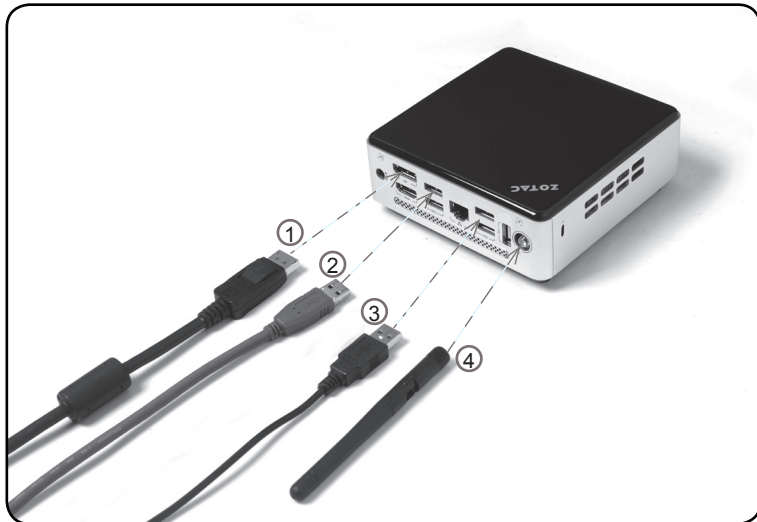1. Connect the SPDIF cable to the headphone/SPDIF adapter correctly.



2. Locate the front panel and connect the headphone/SPDIF adapter to the headphone/SPDIF jack.

# Setting up the ZOTAC ZBOX nano

Please connect the peripherals before using the ZOTAC ZBOX nano.



**1. Connecting a DisplayPort display**
   Connect the DisplayPort connector to the DP port.

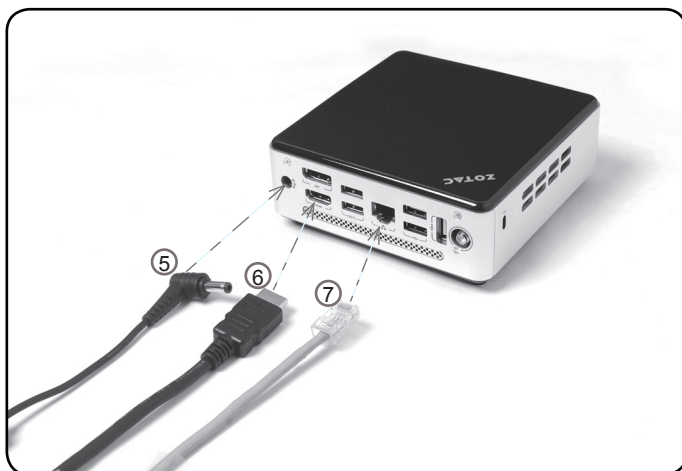**2. Connecting USB 3.0 device**
   Connect USB 3.0 devices such as external hard drives, SSDs and flash drives to the USB 3.0 port.

**3. Connecting USB 2.0 device**
   Connect USB 2.0 devices like wired/wireless keyboards (varying with areas), mouse devices and printers to the USB 2.0 ports.

**4. Connecting a WiFi antenna module**
   Connect a WiFi antenna module to the WiFi antenna connector.

## 5. 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.

## 6. 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. (When both the HDMI and the DP are connected, the audio output is from HDMI by default.)

## 7. Connecting to a home network

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.

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 cover or block the ventilation holes on ZOTAC ZBOX nano. To ensure proper operation and reliability, leave aproximately 4 inches (10 cm) of spacing in front of the ventilation holes.

• ZOTAC ZBOX nano mini-PC systems provide ample expansion in a miniature form factor, please use connectors and cables that are appropriate in size to avoid interference.

## Mounting the ZOTAC ZBOX nano to an LCD monitor

The ZOTAC ZBOX nano is monitor-mountable using the included VESA mount.

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

2. Align the ZOTAC ZBOX mounting holes to the VESA mount attachment pegs. Attach the ZOTAC ZBOX to the VESA mount and gently press down to secure the ZBOX to the mount.
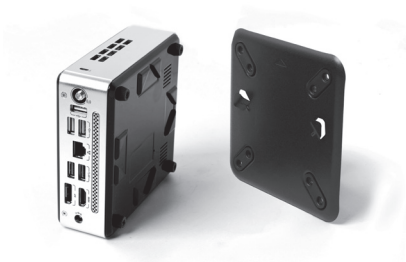
3.  Connect the ZOTAC ZBOX nano to your LCD monitor with an HDMI/DP cable.

# 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 7 32bit/64bit
- Windows 8.1 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.

*Note: For best compatibility, please only use the USB 2.0 ports as the OS installation source drive connection.*

## 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 7 32bit/64bit
- Windows 8.1 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:

    - AMD Chipset Driver
    - AMD Graphics Driver
    - Realtek HD Audio Driver
    - Realtek Network Driver
    - Wireless Network Driver
    - Bluetooth Driver
    - MassStorage Driver
    - 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 nano.

3.   Select the driver you want to install. The driver installer should launch.
4.   Follow the onscreen instructions for the selected driver to install.
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.
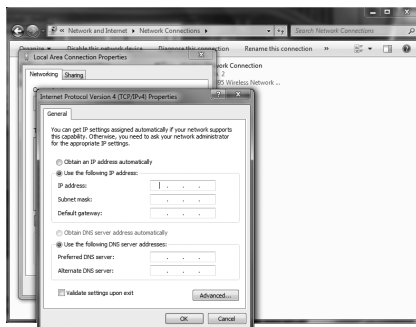
## Using a dynamic IP (PPPoE connection)

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.

☞ Contact your internet Service Provider (ISP) if you have problems connecting to the network.
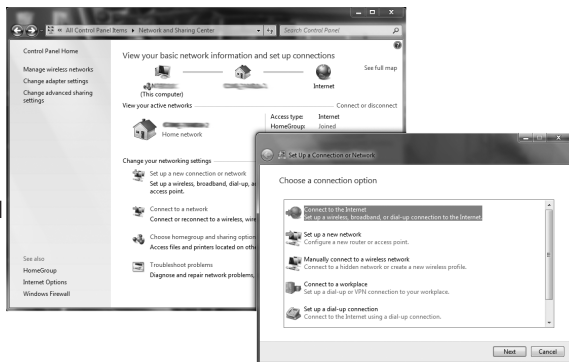
## Configuring audio output via an HDMI device

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 "AMD HDMI Output".
3. Click the "Set as Default" in the lower right hand corner.
4. Click "OK" to exit the setup.