

# Multimedia Devices

## Chapter 8

# This presentation covers:

- > Attitude
- > Multimedia Overview
- > Optical Disk Drive Overview
- > Optical Drive Interfaces
- > ODDs and Discs Preventive Maintenance
- > Motherboard Audio Ports
- > Installing Sound Cards
- > Scanners
- > Installing and Configuring Other Peripheral Devices

# Qualities of a Good Technician

“Soft skills” as they are known across many industries  
are essential

# Attitude is Important

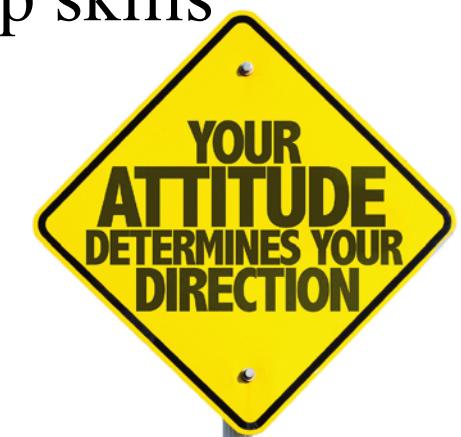
Some consider having a good attitude as simply being positive at work, but this is not the entire picture.

A technician with a good attitude has the following traits:

- > Is proactive, not reactive
- > Projects confidence
- > Seeks solutions instead of providing excuses
- > Accepts responsibility for actions taken

# Attitude is Important, cont'd

- > Deals with priority changes professionally
- > Cooperates and enjoys working with others
- > Maintains professionalism even when working with a co-worker who is unethical, un-professional, or uncooperative
- > Embraces problems as challenges to learn and develop skills



# Multimedia and Drives

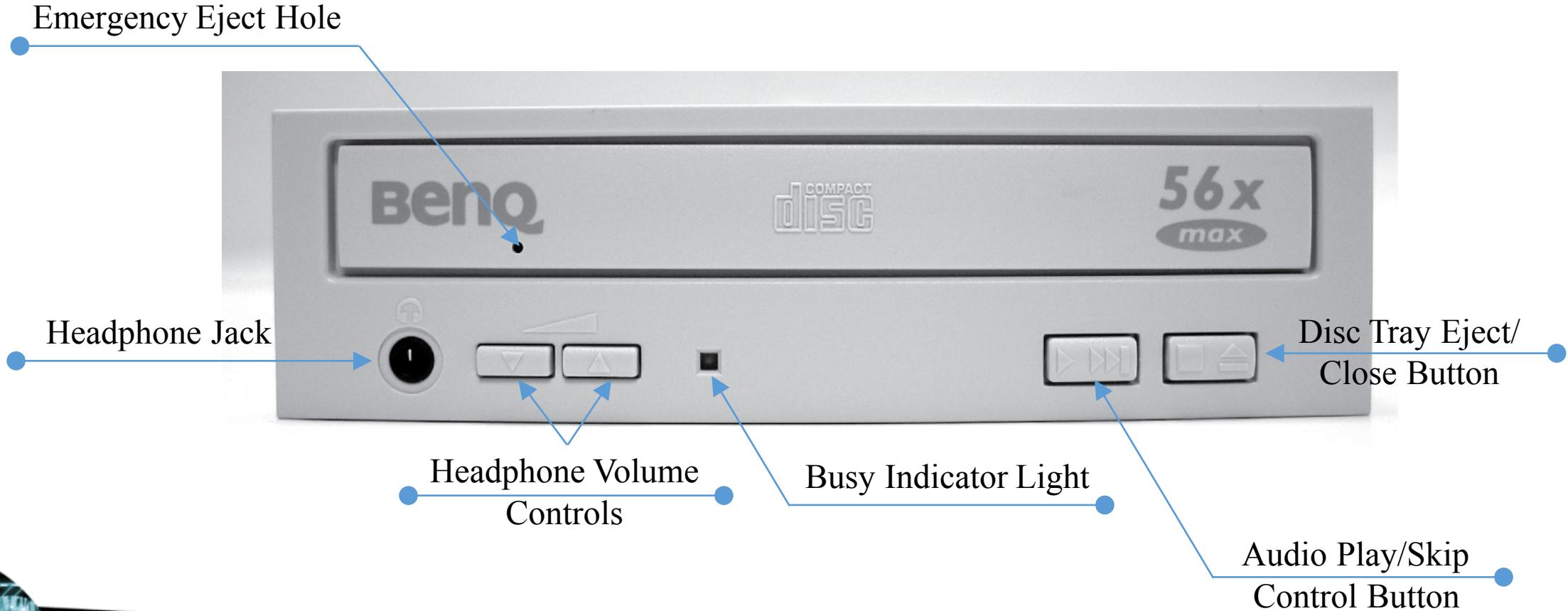
# Multimedia Overview

- > There are many types of multimedia devices - this chapter focuses on the most popular areas:
  - > Optical drive technologies
  - > Sound cards
  - > Cameras
  - > Speakers

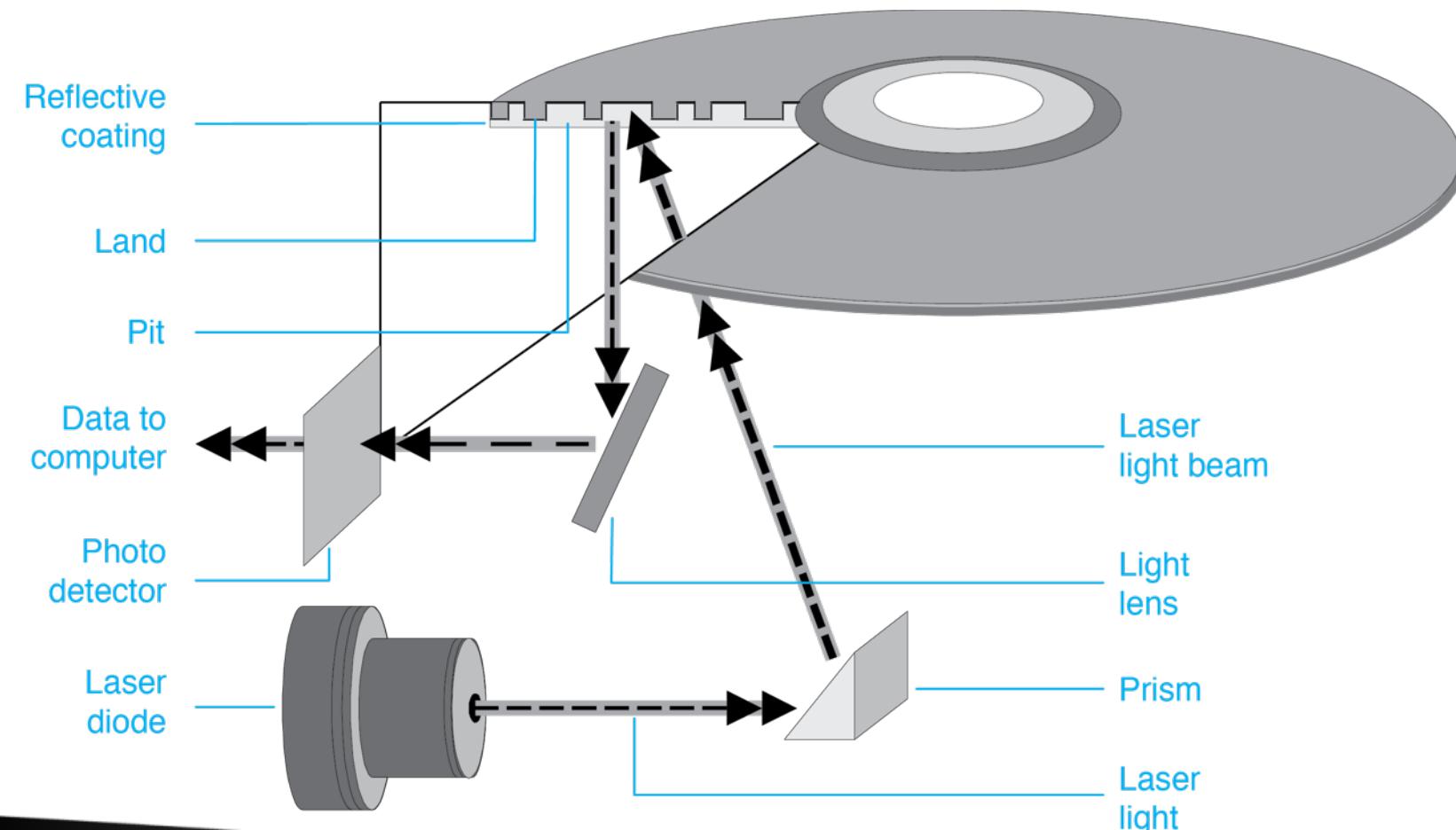
# Optical Disk Drive Overview

- > ODDs include:
  - > Compact disc (CD) - Often for music or purchased applications
  - > Digital video disc (DVD) - Often used for movies, backing up data, or purchased applications
  - > Blu-ray drives (BD) - Tend to be used for film distribution and for video games
- > Features
  - > ODDs with an “R” designation can read only from a disk
  - > ODDs with an “RW” or “RE” designation can perform both reads and writes
  - > ODDs with a “DL” designation use dual-layer technology where two physical layers are available on the same side of the disc

# BenQ CD Drive Front Panel Controls



# Inside a CD Drive



# Optical Drive Interfaces

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# Optical Drive Interfaces

The following will help you decide which optical drive interface to recommend for:

- > Internal Drive

- > Open the case to see if a drive bay is available if the drive is internal
- > Check that a power connection is available if the drive is internal

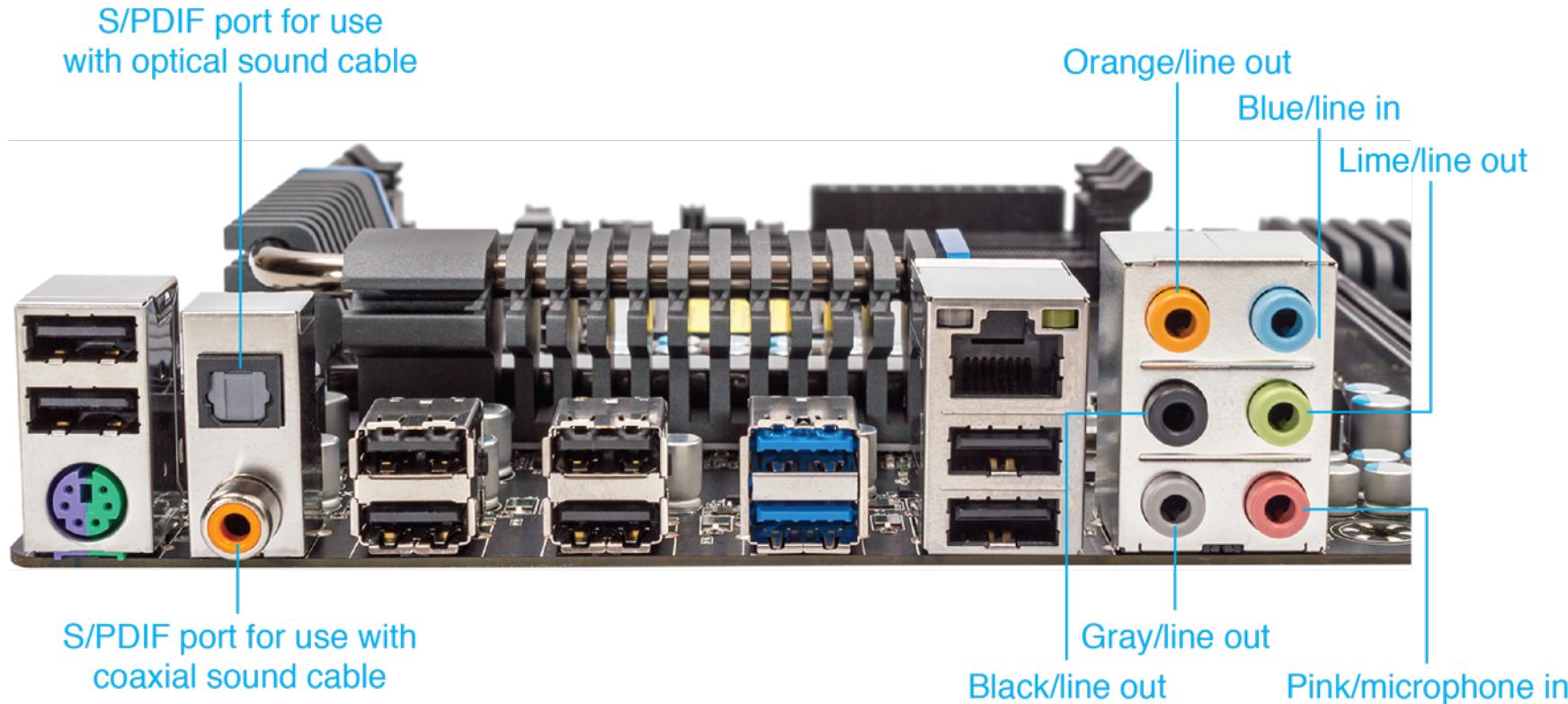
- > External Drive

- > Check what eSATA, eSATAp, USB, or IEEE 1394 ports are available if the drive is external
- > Check with the customer about features such as buffer memory and writing labels to ensure the problem is not related to other components in the computer

# ODDs and Discs Preventive Maintenance

- > CDs and DVDs have a protective coating over the aluminum alloy-based data layer
- > Blu-ray has a requirement that the BD media be scratch-resistant
- > Both are still subject to fingerprints, dust, and dirt
  - > Handle a disc by the edges
  - > Keep the disc in a sleeve or case
  - > Never touch a disc's surface
  - > Store discs in a cool location

# Motherboard Audio Ports



# Installing Sound Cards

The steps involved in installing a sound card are similar to the steps involved in installing any other adapter

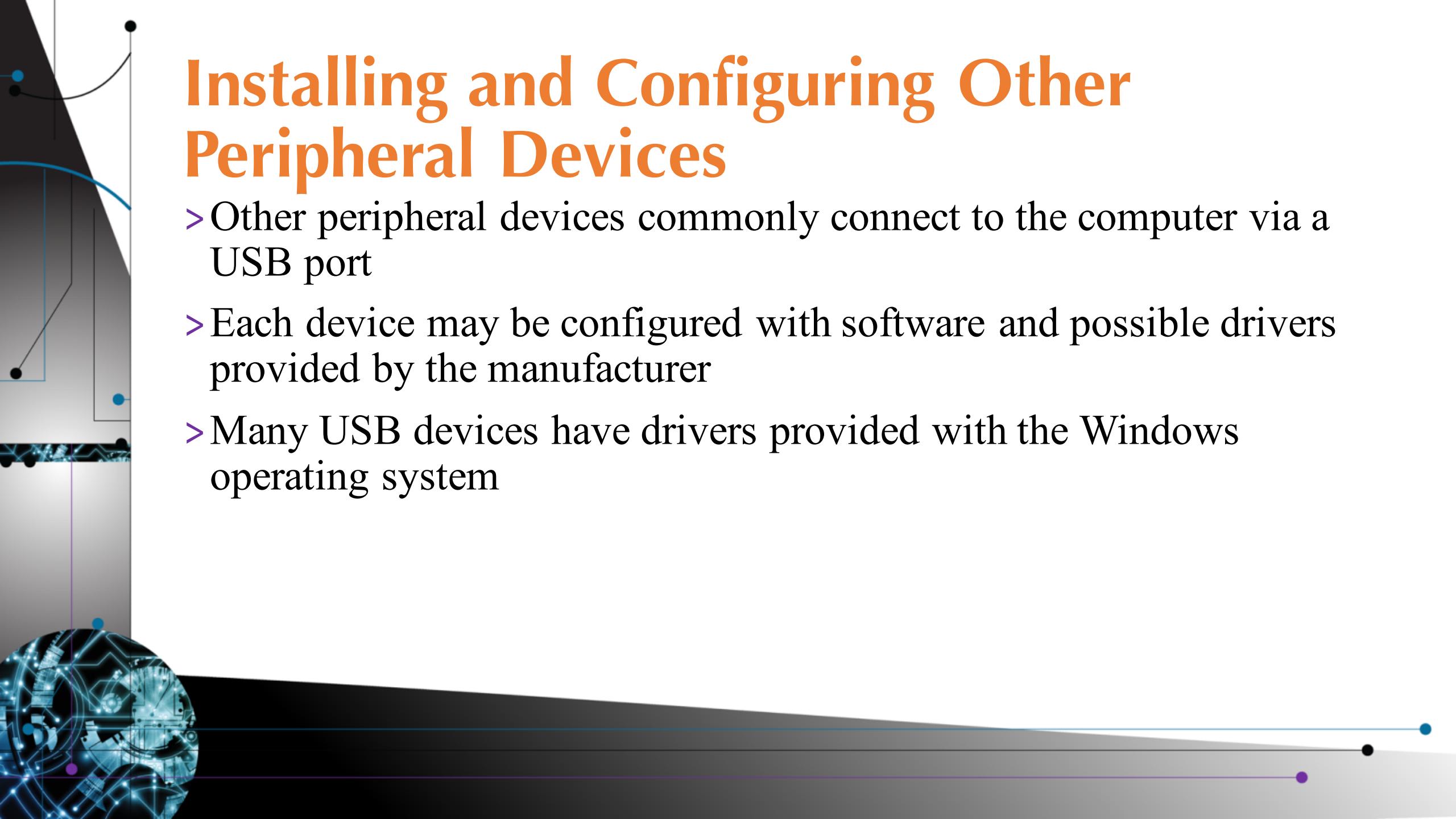
- > Step 1. Power off the computer, remove the computer case, and locate an empty expansion slot
- > Step 2. Attach appropriate cables, such as the audio cable, from the optical drive to the adapter
- > Step 3. Attach external devices, such as speakers
- > Step 4. Power on the computer
  - > Windows should detect that new hardware has been installed
- > Step 5. Load the appropriate device drivers for the sound card

# Scanners

- > A scanner is commonly built into a multifunction device (MFD) such as a printer, scanner, copier, and/or fax machine
- > Also called all-in-one devices (AIO)
- > Portable and handheld scanners are being made obsolete due to cameras in mobile devices



Scanner



# Installing and Configuring Other Peripheral Devices

- > Other peripheral devices commonly connect to the computer via a USB port
- > Each device may be configured with software and possible drivers provided by the manufacturer
- > Many USB devices have drivers provided with the Windows operating system

# Other Multimedia Devices

- > Digital camera
- > Webcam
- > Gamepad
- > Joystick
- > Motion sensor
- > Digitizer
- > Smart card reader



# Multimedia Storage

- > Multimedia devices commonly store data on flash media
- > Use a memory card reader to copy stored media files onto a computer



# Computer Terms

**Refer to the glossary terms at the end of the textbook chapter. Review Chapter 8 and become familiar with the terms.**

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