

# Multimedia User Guide

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## Product notice

This user guide describes features that are common to most models. Some features may not be available on your computer.



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# Table of contents

## 1 Using multimedia hardware

Using the audio features .....	1
Using the audio-in (microphone) jack .....	3
Using the audio-out (headphone) jack .....	3
Adjusting the volume .....	4
Using the video features .....	5
Using the external monitor port .....	5
Using the camera (select models only) .....	6
Identifying camera components .....	6
Adjusting camera properties .....	7
Capturing business card images .....	8
Capturing video on the integrated camera .....	10
Example: Capturing video with Windows Movie Maker .....	10
Streaming video with an instant messaging program .....	10
Example: Streaming video with Windows Messenger .....	10
Taking still photographs with the integrated camera .....	11

## 2 Working with multimedia software

Opening preinstalled multimedia software .....	13
Installing multimedia software from a disc .....	14
Using multimedia software .....	14
Preventing playback disruptions .....	14
Changing DVD region settings .....	14
Observing the copyright warning .....	15

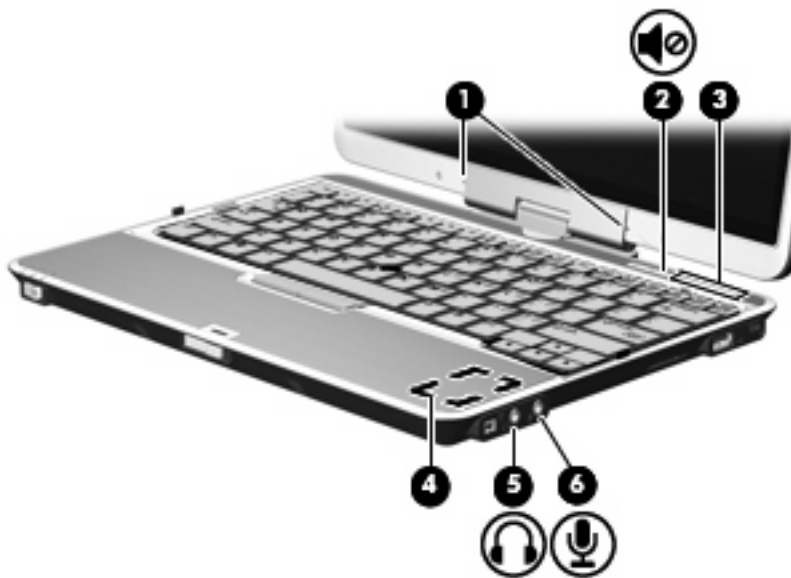
Index .....	16
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# 1 Using multimedia hardware

## Using the audio features

The following illustration and table describe the audio features of the computer.



Component	Description
(1) Internal microphones (2) <b>NOTE:</b> Select models have only one internal microphone.	Record sound and transmit sound for video conferencing and Voice Over IP (VoIP).
(2) Volume mute button	Mutes and restores computer sound.
(3) Volume scroll zone	Adjusts speaker volume: <ul style="list-style-type: none"><li>To decrease volume, slide your finger across the volume scroll zone from right to left. You can also tap or press the left half of the volume scroll zone.</li><li>To increase volume, slide your finger across the volume scroll zone from left to right. You can also tap or press the right half of the volume scroll zone.</li></ul>
(4) Speaker (on the bottom side of the computer)	Produces sound.

Component	Description
(5) Audio-out (headphone) jack	Connects optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
(6) Audio-in (microphone) jack	Connects an optional computer headset microphone or monaural microphone.



## Using the audio-in (microphone) jack

The computer is equipped with a stereo (dual-channel) microphone jack that supports an optional stereo array or monaural microphone. Using sound recording software with external microphones allows for stereo recordings.

When connecting a microphone to the microphone jack, use a microphone with a 3.5-mm plug.

## Using the audio-out (headphone) jack

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- ⚠ **WARNING!** To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset.
  - ⚠ **CAUTION:** To prevent possible damage to an external device, do not plug a single sound channel (monaural) connector into the headphone jack.
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In addition to connecting headphones, the headphone jack is used to connect the audio input function of an audio device such as external powered speakers or a stereo system.

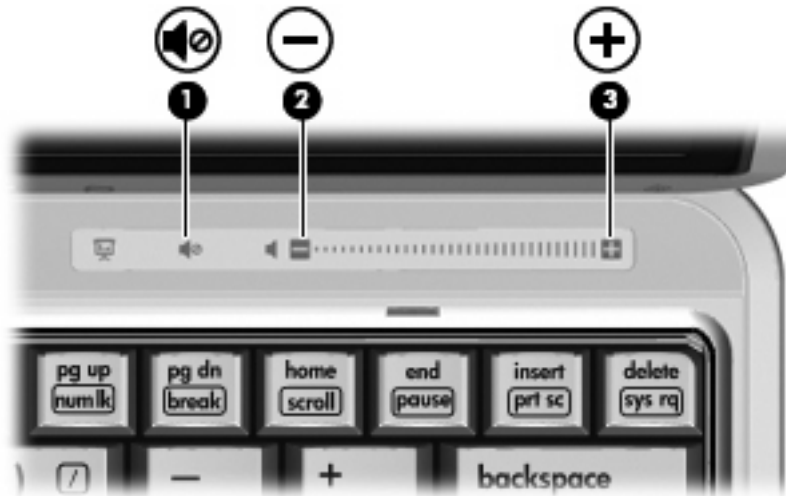
When connecting a device to the headphone jack, use only a 3.5-mm stereo plug.

When a device is connected to the headphone jack, the speakers are disabled.

## Adjusting the volume

You can adjust the volume using the following controls:

- Computer volume buttons:
  - To mute or restore volume, press the mute button **(1)**.
  - To decrease volume, slide your finger across the volume scroll zone **(2)** from right to left. You can also tap or press the left half of the volume scroll zone.
  - To increase volume, slide your finger across the volume scroll zone **(3)** from left to right. You can also tap or press the right half of the volume scroll zone.



- Windows® volume control:
  - a. Click the **Volume** icon in the notification area, at the far right of the taskbar.
  - b. Increase or decrease the volume by moving the slider up or down. Select the **Mute** check box to mute the volume.

– or –

- a. Double-click the **Volume** icon in the notification area.
- b. In the Master Volume column, you can increase or decrease the volume by moving the **Volume** slider up or down. You can also adjust the balance or mute the volume.

If the Volume icon is not displayed in the notification area, follow these steps to add it:

- a. Select **Start > Control Panel > Sounds, Speech, and Audio Devices > Sounds and Audio Devices > Volume** tab.
  - b. Select the **Place volume icon in the taskbar** check box.
  - c. Click **Apply**.
- Program volume control:

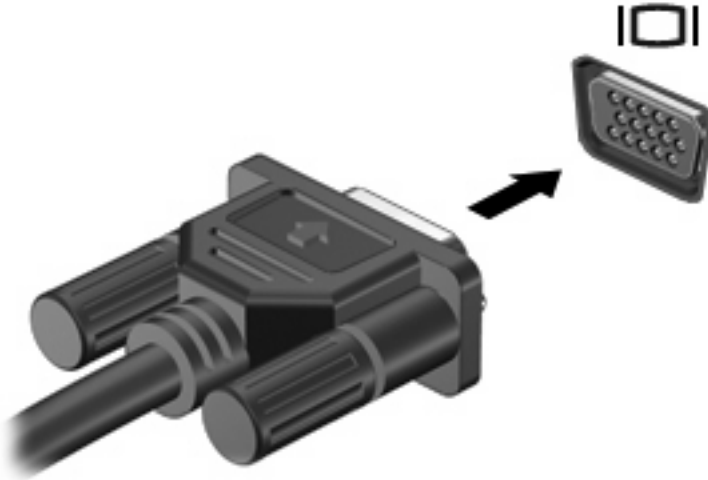
Volume can also be adjusted within some programs.

# Using the video features


## Using the external monitor port

The external monitor port connects an external display device, such as an external monitor or a projector, to the computer.

- ▲ To connect a display device, connect the device cable to the external monitor port.



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 **NOTE:** If a properly connected external display device does not display an image, press **fn+f4** to transfer the image to the device. Repeatedly pressing **fn+f4** alternates the screen image between the computer display and the device.

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## Using the camera (select models only)

Select computer models include an integrated camera, located on the top of the display. The camera can be used with a variety of software for the following functions:

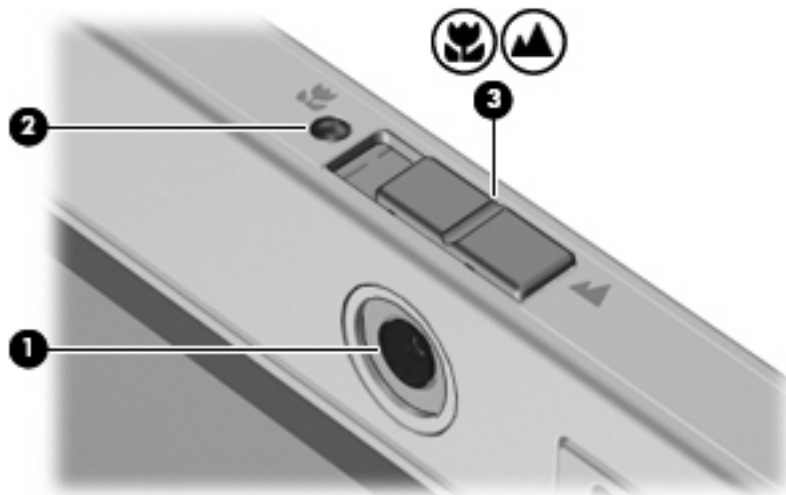
- Capturing video
- Streaming video with instant message software
- Taking still photos

 **NOTE:** For information about using software designed for use with the integrated camera, refer to the online Help for that software.

For optimum performance, observe the following guidelines while using the integrated camera:

- Be sure that you have the latest version of an instant message program before attempting a video conversation.
- Your integrated camera may not work properly across some network firewalls. If you are having trouble viewing or sending video to someone on another LAN or outside your network firewall, contact your Internet service provider for assistance.
- Whenever possible, place bright light sources behind the camera and out of the picture area.

## Identifying camera components



Component	Description
(1) Camera	Records video and captures still photographs.
(2) Camera light	On: The camera is streaming video or recording.
(3) Camera mode switch	<ul style="list-style-type: none"><li>• Slide the switch to the left to put the camera into macro mode. Macro mode uses a focal length of approximately 10 cm for capturing close-up images.</li><li>• Slide the switch to the right to put the camera into normal mode. Normal mode uses a focal length of approximately 50 cm for capturing images within a standard range of distance from the camera.</li></ul>

## Adjusting camera properties

You can adjust the following camera properties:

- **Brightness**—Controls the amount of light that is incorporated into the image. A higher brightness setting creates a brighter image; a lower brightness setting creates a darker image.
- **Contrast**—Controls the difference between lighter and darker areas on the image. A higher contrast setting intensifies the image; a lower contrast setting maintains more of the original information's dynamic range but leads to a flatter image.
- **Hue**—Controls the aspect of color that distinguishes it from another color (what makes a color red, green, or blue). Hue is distinct from saturation, which measures the intensity of the hue.
- **Saturation**—Controls the strength of color in the final image. A higher saturation setting creates a bolder image; a lower saturation setting creates a more subtle image.
- **Sharpness**—Controls the definition of edges in an image. A higher sharpness setting creates a more defined image; a lower sharpness setting creates a softer image.
- **Gamma**—Controls the contrast affecting the mid-level grays or midtones of an image. Adjusting the gamma of an image allows you to change the brightness values of the middle range of gray tones without dramatically altering the shadows and highlights. A lower gamma setting makes grays look black, and makes dark colors even darker.

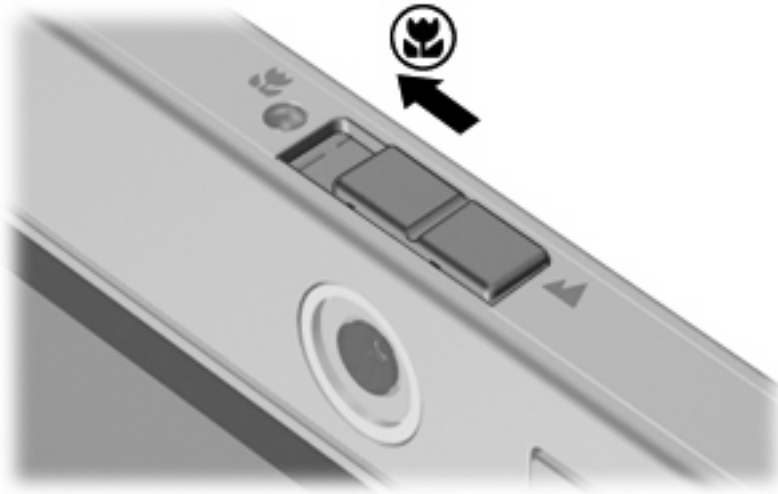
The Properties dialog box is accessible from various programs that use the integrated camera, usually from a configuration, settings, or properties menu.

## Capturing business card images

You can use the camera with the Presto! BizCard program to capture business card images and export the text to many types of address book software, such as Microsoft Outlook Contacts.

To capture a business card image:

1. Slide the camera mode switch to the left to put the camera into macro mode.



2. Open Presto! BizCard by selecting **Start > All Programs > NewSoft > Presto! BizCard > Presto! BizCard**.
3. To capture one business card, select **File > Snap One Card and Recognize**.

– or –

To capture multiple business cards, select **File > Snap Cards and Recognize**.


The Preview window opens.

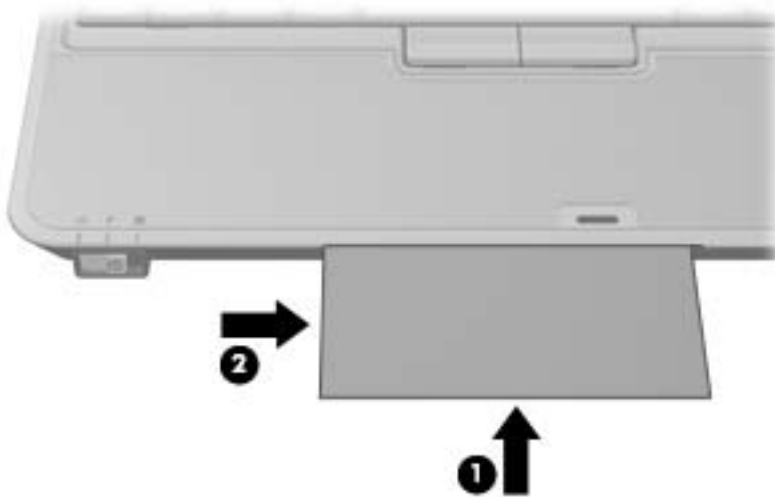
4. Slowly lower the display (1) until the camera light (2) stops blinking and you hear a sound.



The camera is now in focus.

5. Insert a business card into the business card slot on the front of the computer (1) and push the card to the right (2) to align it with the camera.

 **NOTE:** Be sure that any text on the bottom of the card is not obscured by the slot. If any text is obscured by the slot, rotate the card 180 degrees.



The camera captures the business card image and the camera light turns off.

6. If you are capturing multiple business card images, remove the business card and insert another one. The camera light turns on when the card is in focus. The camera then captures the business card image and the camera light turns off.


Repeat this step for additional business cards.

7. When you have finished capturing one or more business card images, remove the business card from the slot, raise the display, and slide the camera mode switch back to normal mode.
8. Review the data captured by Presto! BizCard to be sure that all data was captured.

For more information on using Presto! BizCard, refer to the software Help.

## Capturing video on the integrated camera

You can use the integrated camera to capture video for playback at a later time.


 **NOTE:** Before capturing video, be sure that the camera mode switch is set to either normal or macro mode, depending on your needs.

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### Example: Capturing video with Windows Movie Maker

The following example is provided for demonstration purposes only. The specific video-capturing program may not be installed on your computer.


1. Select **Start > All Programs > Windows Movie Maker**.
2. Click **Capture from Video Device**. The Video Capture Wizard opens.
3. Select the integrated camera from the list of available devices.
4. Check the microphone and camera settings, and adjust if necessary.
5. Click **Next**.
6. Select the file name and path where you want to save the video file, and then click **Next**.
7. Select the video settings, and then click **Next**.
8. Click **Start Capture**. When you finish recording, click **Stop Capture**.
9. Click **Finish** to save the video file and close the wizard.

 **NOTE:** You can also capture video with the camera using other programs. For more information, refer to the software Help for the particular program.

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## Streaming video with an instant messaging program

You can use the integrated camera to send real-time video information through an instant-messaging program, such as Windows Messenger.

 **NOTE:** Before streaming video, be sure that the camera mode switch is set to either normal or macro mode, depending on your needs.

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### Example: Streaming video with Windows Messenger

The following example is provided for demonstration purposes only. The specific instant-messaging program may not be installed on your computer.

1. Open Windows Messenger by double-clicking the icon in the notification area.
2. Sign in to Windows Messenger.
3. Select **Actions > Call/Video > Start a Video Call**.



4. Click the name of the person you want to connect with, and then click **OK**. An instant message window is displayed, and your camera image is displayed next to your message area.
5. If the Audio and Video Tuning Wizard opens, follow the instructions to optimize your camera and microphone settings.


## Taking still photographs with the integrated camera

You can also use the integrated camera to take still pictures.

1. Be sure that the camera mode switch is set to either normal or macro mode, depending on your needs.
2. Select **Start > Control Panel > Scanners and Cameras**.
3. Double-click the listing for the camera, and then click **Next**.
4. Click **Take Picture**.
5. Follow the directions in the Picture Wizard to select any of the following options:
  - Publish the pictures to a Web site.
  - Order prints of the pictures.
  - Save the pictures on your computer.

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## 2 Working with multimedia software


 **NOTE:** To use optical discs (CDs and DVDs), you must use the optional HP 2700 Ultra-Slim Expansion Base or an optional external MultiBay with an optical drive.

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The computer includes preinstalled multimedia software. Some computer models also include additional multimedia software on an optical disc.

Depending on the hardware and software included with the computer, the following multimedia tasks may be supported:

- Playing digital media, including audio and video CDs, audio and video DVDs, and Internet radio
- Creating or copying data CDs
- Creating, editing, and burning audio CDs
- Creating, editing, and burning a video or movie to a DVD or video CD


 **CAUTION:** To prevent loss of information or damage to a disc, observe the following guidelines:

Before writing to a disc, connect the computer to a reliable external power source. Do not write to a disc while the computer is running on battery power.

Before writing to a disc, close all open programs except the disc software you are using.

Do not copy directly from a source disc to a destination disc or from a network drive to a destination disc. Instead, copy from a source disc or network drive to your hard drive, and then copy from your hard drive to the destination disc.

Do not use the computer keyboard or move the computer while the computer is writing to a disc. The write process is sensitive to vibration.

 **NOTE:** For information about using software included with the computer, refer to the software manufacturer's instructions that may be provided on disc, as online Help files, or on the software manufacturer's Web site.

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## Opening preinstalled multimedia software

1. Select **Start > All Programs**.
2. Click the program that you want to open.


## Installing multimedia software from a disc

1. Insert the disc into the optical drive.
2. When the installation wizard opens, follow the on-screen instructions.
3. Restart the computer if prompted to do so.

## Using multimedia software

1. Select **Start > All Programs**, and then open the multimedia program you want to use. For example, if you want to use Windows Media Player to play an audio CD, click **Windows Media Player**.

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 **NOTE:** Some programs may be located in subfolders.

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2. Insert the media disc, such as an audio CD, into the optical drive.
3. Follow the instructions on the screen.

– or –

1. Insert the media disc, such as an audio CD, into the optical drive.  
An AutoPlay dialog box opens.
2. Click a multimedia task from the list of tasks.

## Preventing playback disruptions

To reduce the possibility of playback disruption:

- Save your work and close all open programs before playing a CD or a DVD.
- Do not connect or disconnect hardware while playing a disc.

Do not initiate Hibernation or Standby while playing a disc. Otherwise, you may see a warning message asking if you want to continue. If this message is displayed, click **No**. After you click No, the computer may behave in either of the following ways:

- Playback may resume.

– or –

- The playback window in the multimedia program may close. To return to playing the CD or DVD, click the **Play** button in your multimedia program to restart the disc. In rare cases, you may need to exit the program and then restart it.

## Changing DVD region settings

Most DVDs that contain copyrighted files also contain region codes. The region codes help protect copyrights internationally.

You can play a DVD containing a region code only if the region code on the DVD matches the region setting on your DVD drive.

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△ **CAUTION:** The region settings on your DVD drive can be changed only 5 times.

The region setting you select the fifth time becomes the permanent region setting on the DVD drive.

The number of allowable region changes remaining on the drive is displayed in the Changes remaining box on the DVD Region tab. The number in the field includes the fifth and permanent change.

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To change settings through the operating system:

1. Select **Start > My Computer**.
2. Right-click in the window and select **Properties > Hardware** tab > **Device Manager**.
3. Click the "+" sign next to **DVD/CD-ROM drives**, right-click the DVD drive for which you want to change region settings, and then click **Properties**.
4. Make the desired changes on the **DVD Region** tab.
5. Click **OK**.

## Observing the copyright warning

It is a criminal offense, under applicable copyright laws, to make unauthorized copies of copyright-protected material, including computer programs, films, broadcasts, and sound recordings. Do not use this computer for such purposes.

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# Index

- A**
  - audio features 1
  - audio-in (microphone) jack 2, 3
  - audio-out (headphone) jack 2, 3
- B**
  - business card reader software 8
  - button, volume mute 4
  - buttons, volume mute 1
- C**
  - camera
    - capturing business cards 8
    - identifying 6
    - macro mode 6
    - normal mode 6
    - properties 7
    - switching modes 8
    - using 6
  - camera light, identifying 6
  - camera mode switch 6
  - CD
    - playing 14
    - protecting 12
    - writing to 12
  - copyright warning 15
- D**
  - DVD
    - changing region setting 14
    - playing 14
    - protecting 12
    - writing to 12
  - DVD region settings 14
- E**
  - earbuds 2
  - external monitor port 5
- F**
  - focal length 6
- H**
  - headphones 2
- I**
  - internal microphones 1
- J**
  - jacks
    - audio-in (microphone) 2, 3
    - audio-out (headphone) 2, 3
- L**
  - lights
    - camera 6
- M**
  - macro mode 6
  - microphone 2
  - microphones, internal 1
  - microphones, supported 3
  - monitor, connecting 5
  - multimedia software
    - described 12
    - using 14
  - mute button 1, 4
- N**
  - normal mode 6
- O**
  - optical disc
    - writing to 12
  - optical drive
    - playing 14
    - protecting 12
- P**
  - ports
    - external monitor 5
  - programs
    - multimedia 12
    - using 14
  - projector, connecting 5
  - protecting playback 14
- R**
  - region codes, DVD 14
- S**
  - software
    - business card reader 8
    - multimedia 12
    - using 14
  - speaker 1
  - switches
    - camera mode 6
- T**
  - TV 3
- V**
  - VCR 3
  - volume mute button 1, 4
  - volume scroll zone 1, 4
  - volume, adjusting 4

