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This product or its use may be covered by the following United States Patent: 6,529,920, and other pending patent applications.

IMPORTANT: Please read the End User License Agreement with this product before using the accompanying software program(s). You accept the terms of the End User License Agreement by using any part of the software. Using any non-authorized charging accessories or ink cartridges may damage your Pulse smartpen and voids your Pulse smartpen's warranty.

Software Download Available

Livescribe® Desktop software, updates and new versions of the software are available from www.livescribe.com/support.

Agency Compliance Information

Product, regulatory, and compliance information can be found in Chapter 13: Regulatory Information.

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About This Guide

This Pulse smartpen User Manual contains detailed descriptions of the Pulse smartpen, applications that run on the Pulse smartpen platform, and the Livescribe Desktop application used for transferring notes to your computer where you can store and search them. You’ll also find information about the Livescribe Online community, and how to upload and share interactive movies of your notes and drawings.

Throughout this Manual, you will be instructed to “tap” on paper controls to perform certain functions. When you see this instruction, use the ink tip of your Pulse smartpen to tap on the printed buttons within the included notebook and Getting Started Guide.
Chapter 1: Introducing the Pulse™ Smartpen

Congratulations on the purchase of your new Pulse™ smartpen. Soon you’ll be able to personalize your Pulse smartpen settings, use your Pulse smartpen applications, share your notes at Livescribe Online, and download new applications as they become available. To get set up, follow the easy steps in Chapter 2: Using Your Pulse Smartpen.

What’s in the Box

- Pulse smartpen
- 3D Recording Headset and neckstrap
- USB mobile charging cradle
- Single-subject, college-ruled notebook
- Carry-all soft case
- Ink cartridges and stylus
- Getting Started Guide
- Interactive controls sticker sheet
- Demo card

System Requirements

- Windows XP SP2* or Windows Vista operating system
  * .Net Framework 2.0 included with the Livescribe Desktop installation software.
- 600 MHz CPU or higher
- 512 MB RAM
- 100MB of free hard disk space
- 1 available powered USB Port
- Internet connection
The Pulse Smartpen

1. Power button
2. Headset jack
3. Built-in microphone
4. Organic Light-Emitting Diode (OLED) display
5. Built-in speaker
6. USB connector
7. Infrared camera
8. Removable ink cartridge
9. Rechargeable lithium battery (non-removable)

USB Mobile Charging Cradle

The Pulse smartpen USB mobile charging cradle serves several important functions. Once you dock your Pulse smartpen into the cradle, your written and recorded data will be automatically transferred to your computer after the Livescribe Desktop application is opened. The cradle will also allow you to charge your Pulse smartpen through the USB port on your computer.

1. Nav Plus (navigation control)- If you have no Livescribe dot paper available, you can use this label to navigate your Pulse smartpen menu and applications.
2. USB connector- A magnet helps your Pulse smartpen lock snugly into place.
3. Ink cartridge removal ring- To replace ink cartridges see Chapter 9: Accessories & Supplies.
3D Recording Headset with Neckstrap

With your Pulse smartpen, you can record audio with either the built-in microphones or the 3D Recording Headset. The built-in microphones provide monaural recordings and are designed for smaller recording environments, such as a conference room. When recording in larger spaces, we recommend the use of the included 3D Recording Headset, which contains a microphone in each earbud. The dual microphones enable binaural recordings, which accurately recreate the spatial audio environment.

To learn more about using the 3D Recording Headset with the neckstrap, refer to Chapter 9: Accessories & Supplies.

1. Left and right speakers
2. Left and right microphones
3. Neckstrap connection stem

**TIP:** Make sure the “L” earbud is in your left ear and the “R” earbud is in your right ear.

**How do binaural recordings work?**

Binaural recording is a special type of stereo recording that uses two microphones, one placed in each ear. This type of recording provides the most accurate spatial sound quality because the microphones effectively mimic your ears—when you play a binaural recording back, it sounds like you are actually in the location where the sound was recorded.

Once recorded, the binaural effect can be played back only using stereo earphones. It can also be played back as a regular stereo recording over any type of headphones or speakers.

**TIP:** The included 3D Recording Headset and Pulse smartpen have a custom jack, required to enable binaural recordings. If you want to use your own 3.5mm stereo headphone for playback, you can purchase a standard 2.5mm to 3.5mm adaptor which will enable your current headphone to be used in conjunction with your Pulse smartpen.
What’s New in Version 1.3?

- Version 1.3 of your Pulse smartpen includes the Scientific calculator.
Chapter 2: Using Your Pulse Smartpen

Orienting Your Display

1. Turn your Pulse smartpen on by pressing the Power button.

2. Open the inside cover of your notebook.

3. Under Settings, tap on the Left or Right button to orient your display for left- or right-handed use.

**NOTE:** To learn about Scroll Speed and Brightness settings refer to Chapter 5: Pulse Smartpen Settings.
Setting Time and Date

1. Turn your Pulse smartpen on by pressing the Power button.

2. Open the inside cover of your notebook.

3. Under Settings, tap the Set Date button and use the printed keypad to enter the date.
   a. Example: Tapping 061208 sets the date to Thursday, June 12, 2008.

4. Tap the Set Time button and use the printed keypad to enter the time.
   a. Example: Tapping 1201PM sets the time to 12:01PM.
NOTE: Setting the correct time and date on your Pulse smartpen is important because files you create with your Pulse smartpen are named using the time and date they are created. To learn about additional settings, refer to Chapter 5: Pulse Smartpen Settings.

Charging your Pulse Smartpen

1. Plug your USB mobile charging cradle into the USB port on your computer.

2. Place your Pulse smartpen in your USB mobile charging cradle.
   a. If your computer displays a Found New Hardware message, dismiss it and follow the steps in Chapter 7: Livescribe Desktop.

IMPORTANT: A full charge can take up to 2.5 hours. To determine if your Pulse smartpen is fully charged, tap on the Battery button referred to in the section below, Checking Status.

Checking Status

Check the status of your Pulse smartpen using the buttons in the printed Status box located on the inside covers of your notebook.
Tap the Time button to check the current time.

Tap the Date button to check the current date.

Tap the Battery button to see the current battery charge.

Tap the Storage button once to see amount of remaining storage in megabytes and tap a second time to see the remaining recording time based on the current audio quality settings. Refer to Advanced Audio Settings in Chapter 5: Pulse Smartpen Settings to customize your audio quality settings.

**Livescribe Dot Paper**

To perform its many operations, the Pulse smartpen requires Livescribe dot paper. This paper is standard paper with printed microdots on its surface. These dots are nearly invisible to the human eye. However, the Pulse smartpen can easily see these dots and uses them to know which page you are writing on and the exact location on that page. The Pulse smartpen can even see these dots through the ink you write on your pages.

The microdots are printed on each page in a special pattern based on technology from Anoto AB. This dot pattern consists of small dots (100 micrometers in diameter) arranged with a spacing of approximately 0.3 mm. The dot pattern overlays an imaginary square grid. The dots are slightly displaced from the grid, with each dot in one of four possible positions, forming the proprietary Anoto dot pattern.

![Dot Pattern Diagram](image)

The dot pattern identifies the specific page and locations on the page of the notes you write. The Pulse smartpen uses the dot pattern in a way similar to a geographical positioning system (GPS). But, instead of identifying locations on land, it finds locations on paper and stores your writing as digital ink using those locations. Using this patented dot-positioning system (DPS), the
Pulse smartpen precisely tracks its own movement on paper. As a result, anything you write – words, numbers or drawings – can be stored, recognized, and intelligently responded to. The area of the entire Anoto dot pattern is huge, and represents a piece of paper the combined size of Europe and Asia. Livescribe dot paper is based on a subset of the entire Anoto dot pattern.

How the Pulse Smartpen Works
When you power on the Pulse smartpen and begin writing on Livescribe paper, the Pulse smartpen captures and stores the notes you write. To capture your writing, the Pulse smartpen uses its built-in infrared camera to take digital snapshots of the dot pattern as the tip moves over the paper as you write.

When recording audio in Paper Replay, the Pulse smartpen links the recorded audio to your notes based on the dot pattern on the page. With this information, the Pulse smartpen can play back the audio that was recorded at the exact time you were writing your notes. Specifically, when you tap on your notes with the Pulse smartpen, it locates the position where you are tapping and starts to play back the audio at the position linked to that paper location.

Managing and Archiving Paper Products
Livescribe prints notebooks, journals, and other Livescribe dot paper products for your Pulse smartpen. There is nothing special about the composition of the paper used for Livescribe dot paper products. However, each page of Livescribe dot paper is printed with thousands of nearly-invisible microdots arranged in a special pattern. Your Pulse smartpen reads these dots to determine which page you are using and where on that page you are tapping or writing. With this information, your Pulse smartpen can capture your notes, link audio to them, and perform other paper-based operations.

Livescribe dot paper products sometimes re-use dot pattern. As a general rule, do not use Livescribe dot paper products with the same dot pattern at the same time. This prevents a potential problem that can happen when viewing your notebooks in Livescribe Desktop: when you write in two notebooks with the same pattern, your notes from the second notebook will be superimposed on your notes from the first notebook when you view them in Livescribe Desktop. Because Livescribe dot paper products are important to working with your Pulse smartpen, you should learn to manage and archive them.
Three Simple Steps for Managing Paper Products

There are three simple steps for managing Livescribe dot paper products. Follow these steps before using a new Livescribe dot paper notebook or journal:

1. When purchasing Livescribe dot paper, buy notebooks or journals that have different numbers from the ones you are currently using. For example, if you are already using Lined Notebook numbered 1 through 4, you should purchase Lined Notebooks number 5 through 8.

2. Before using the new paper product, tap on the Notebook Status Label. If it says you are already using a notebook with the same number, be sure to archive your old notebooks on Livescribe Desktop first.

3. Archive your notebooks and journals after you have finished with them before using another paper product of the same kind and number. After archiving, set aside your old notebook. You will still have a digital copy on the Livescribe Desktop, but you no longer can tap and play paper replay sessions on your previous notebook. To learn how to archive a paper product, see the Livescribe Desktop User Manual located in the Livescribe Desktop Help menu and in your computer’s start menu.

Checking Paper Product Usage with the Notebook Status Label

Each Livescribe dot paper product has a Notebook Status Label on its cover. Using the Notebook Status Label is the best way to tell if you are currently using a Livescribe dot paper product that has the same dot pattern.

To use the Notebook Status Label:

1. When you open a new Livescribe dot paper product, tap on its Notebook Status Label with your Pulse smartpen.
2. Your Pulse smartpen display will show whether you are using another Livescribe dot paper product with the same dot pattern. If you are, archive the older Livescribe dot paper product before using the new one.
Chapter 3: Navigating Your Pulse Smartpen

The Nav Plus

The Nav Plus is a paper-based 5-way navigator that enables you to navigate through the Pulse smartpen Main Menu and application menus.

Using a pre-printed Nav Plus

You can use any Nav Plus you see printed on any Livescribe dot paper product, such as the included notebook. To use a printed Nav Plus:

1. Double-tap the center of the Nav Plus. A double-tap is two taps in quick succession.

   TIP: Double-tapping on the center of a Nav Plus will exit the current application or sub-menu and take you to the Main Menu. The one exception to this rule is that if you are recording with Paper Replay, double-tapping the center will take you to the Main Menu but background recording will continue.

2. Main Menu will be displayed on your Pulse smartpen.
3. Tap down on the directional arrow of the Nav Plus to scroll through a list of applications on your Pulse smartpen.

4. When the desired application name is displayed, tap right to select that application.

5. Tap down to scroll through the application menu.

6. Tap right to select an item in the application menu list.

7. Tap left to return to the previous menu.
8. To return to the Main Menu, tap a series of lefts OR double-tap on the center of the Nav Plus to jump to the Main Menu.

NOTE: Your Pulse smartpen will display small directional arrows to indicate you can scroll through the menu in that direction.

Drawing a Nav Plus
If a pre-printed Nav Plus is not easily accessible, create your own simply by drawing one.

To draw a Nav Plus:

1. Using any Livescribe dot paper product, such as the included notebook, draw intersecting vertical and horizontal lines.

2. Promptly double-tap in the center of the Nav Plus. This will complete the process of creating a Nav Plus.

TIP: Once drawn, the Nav Plus is always accessible for future use.
3. Main Menu is displayed on your Pulse smartpen when you have successfully created a Nav Plus.

Additional tips for drawing your own Nav Plus:

1. The intersecting lines can be drawn in either order.

2. The lines should be about the same length and intersect near their centers.

3. The lines should be fairly straight.
Chapter 4: Using Paper Replay™

With Paper Replay, your Pulse smartpen records audio and links it to what you write. Later, you can tap on any of your notes and hear the audio that was recorded from that moment.

Paper Replay Controls

The Paper Replay control bar printed at the bottom of every notebook page lets you begin and end a recording as well as manipulate the playback of your recording. Remember that whenever you turn on your Pulse smartpen, a digital copy of your notes is being captured whether or not you choose to record audio.

TIP: The Paper Replay printed controls are not page-specific. You can tap Record on one page, begin recording, and then tap Stop on a different page and your Pulse smartpen will stop recording.

Recording

Note: Don’t record without permission. By using Livescribe products and services, you agree to comply with all laws regarding recording.

There are three ways to begin recording audio with your Pulse smartpen:

1. Tap the Record button on the bottom of your notebook.
   a. While your Pulse smartpen is recording, you will see an incrementing timer on your display.

   NOTE: After you initiate a recording, you can use other applications on your Pulse smartpen, such as the Calculator. A blinking Record icon will appear in the bottom right corner of your display to indicate that recording is still in progress. To learn more, see Background Recording in this chapter.
2. Quick Record: If your Pulse smartpen is on, press and hold the Power button for until the display indicates that recording has been initiated. If your Pulse smartpen is off, press and hold the Power button until the start sequence and the word “Recording…” appear on the display.

**TIP:** If you begin writing on Livescribe dot paper, the notes and audio will be linked.

3. Use Nav Plus to begin recording an audio session.
   a. Double-tap on the center of the Nav Plus to go to your Pulse smartpen Main Menu.
   b. Tap down until Paper Replay is displayed.
   c. Tap right to launch the Paper Replay application. You will see the Record Session option.
   d. Tap right to select Record Session. The display will indicate that recording has been initiated.
NOTE: To learn more about using the Nav Plus, refer to. To configure the audio recording settings on your Pulse smartpen, refer to Advanced Audio Settings in Chapter 5: Pulse Smartpen Settings.

Stop Recording or Playback

Stop

There are three ways to stop recording or playback of an audio session.

1. Tap the Stop button on the bottom of your notebook.
2. Turn Power off.
3. If you don’t have access to the paper controls on Livescribe dot paper, use the Nav Plus label on the cradle or carryall soft case to stop recording.
   a. During recording, tap the center of the Nav Plus. Your Pulse smartpen will display Stop Session.
   b. Tap right to stop recording of the session.

Pause and Resume

You can suspend recording or audio playback with the pause button printed on the bottom of each notebook page. To resume recording or playback, simply tap Pause a second time. While your Pulse smartpen is paused, a pause icon will appear on the display.
While your Pulse smartpen is paused, it will continue to capture a copy of your digital notes. Any notes that you write after you tap pause are linked to the audio that occurred the moment before you tapped Pause. When you tap on notes that were written while paused, your Pulse smartpen will play back the recording from the moment just before you tapped Pause.

Audio Playback

There are three ways to begin audio playback:

- Tap any note of the notes you wrote while you recorded using Paper Replay. The recorded audio will play back from the moment the notes were taken.
  
  a. During playback, your Pulse smartpen display will indicate the current position in the recording and the time remaining in your recording.

  ![Playback Controls]

  TIP: Always remember to write something down so that you can begin playback by tapping on your notes. If you forget to write, you can still browse a list of audio sessions stored on your Pulse smartpen with the Nav Plus.

- Tap on any of the following printed controls to access the most recently recorded or played back session.

  a. Jump forward/back

  ![Jump Controls]

  b. Position bar

  ![Position Bar]

  c. Bookmark

  ![Bookmark]

- Use the Nav Plus to browse a list of audio sessions and select the audio file by timestamp:
1. Double-tap the center of the Nav Plus to reach your Pulse smartpen Main Menu.

2. Tap the down arrow until Paper Replay is displayed.

3. Tap the right arrow to select the Paper Replay application menu. The first item in the list is Record Session.

4. Tap on the down arrow to select Play Session.

5. Tap the right arrow to view a list of sessions by timestamp.

6. Tap the down arrow to scroll through the list of sessions.
7. Tap the right arrow to select the audio session that you want to open. Playback will begin.

Controlling Audio Playback

There are various ways that you can control the playback of an audio file on your Pulse smartpen and quickly locate any section of the audio file. All of the controls mentioned below are available on the bottom of each page of your notebook.

**Jump**

You can jump back or forward 10 seconds in an audio file by tapping on the jump controls.

**Speed Jump**

Tap and hold down the Jump back or Jump forward button to continuously jump through an audio file. As you continue to speed jump, the length you jump increases.

**Jump to Position Bar**

If you want to quickly jump to the beginning, end or any position within an audio session, use the Jump to Position bar.

1. Tap anywhere on the position bar to jump to the corresponding position in the audio file.

2. Tap the 0% button to jump directly to the beginning of the current audio session.

**Playback Speed**

If you want to speed listen to the audio file or slow the audio session to replay a specific moment, use the Playback Speed controls.

1. To slow down the audio from normal speed, tap the button.
   a. Tap repeatedly to keep slowing down audio speed.
2. To speed up the audio from normal speed, tap the \( + \) button.
   a. Tap repeatedly to keep increasing the playback speed.

3. To return to normal speed—the speed at which the audio was recorded—tap the \( - \) button.

**NOTE:** Audio that is played back either sped up or slowed down is no longer in stereo. Audio plays in mono until it is returned to normal speed.

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**Audio Bookmarks**

Bookmarks allow you to flag a section of audio and later jump to it quickly and easily. You can add bookmarks while you are recording or later when you are listening to your audio session.

**Adding Bookmarks**

1. Tap the Bookmark button \( \star \) during either recording or playback. A bookmark will be placed at that point in the audio file.

**Reviewing Bookmarks**

After you have added bookmarks to an audio session, you can scan through the bookmarks using the Previous \( \leftarrow \) and Next \( \rightarrow \) bookmark buttons.

During playback, your Pulse smartpen display will indicate the bookmarks in the audio timeline.
Volume

The volume controls allow you to raise, lower or mute the volume. You can un-mute playback by tapping the mute button a second time.

Paper Replay Sessions

When you begin recording with your Pulse smartpen, audio is automatically linked to anything you write on Livescribe dot paper (such as your included notebook). This is called a Paper Replay “session.” A session begins when you start recording audio and ends when you stop recording audio. If you pause recording it is still considered one session.

A session can be any length of time and does not necessarily equal a single page. For example, if you start and stop recording multiple times per page, you will have multiple Paper Replay sessions on one page. Conversely, you may also have one Paper Replay session that spans multiple pages.

The Paper Replay playback controls such as jump, position bar, and bookmark, function within a single Paper Replay session. You can jump forward or back or speed listen to only one Paper Replay session at a time. If you created multiple Paper Replay sessions on one page, you will need to tap on the notes associated with the specific desired recording to begin playback. After playback is initiated, you can then use the playback or bookmark controls to listen to that session.

When you tap on the playback controls before tapping on any of the written notes on a page, your most recently accessed audio recording will play back regardless of whether that recording or those notes are on the current page. This feature allows you to quickly replay your last recording even if you have forgotten to write notes on paper.

Paperless Sessions

If you want to record audio but cannot or do not want to write on Livescribe dot paper, you can create a “paperless” Paper Replay session. To create a paperless session, begin recording audio and don’t take any notes. The new paperless session will appear in the Paper Replay session list.
To access a paperless session, use the Nav Plus to browse Paper Replay sessions stored on your Pulse smartpen. A paperless session is indicated in the Select Session list with an asterisk next to the filename.

If recording the paperless session was the last action you took with your Pulse smartpen, you can also access the session by tapping on the 0% point of the paper control position bar.

**Linking Notes to Previously Recorded Audio**

You can write new notes and link them to a previously recorded audio file by writing on dot paper while you play back the audio recording.

1. Begin audio playback by tapping on your partially written notes or using Nav Plus to play a previously recorded session.

2. Once playback is initiated, begin writing with your Pulse smartpen. Your written notes will be automatically linked to your previously recorded audio or Paper Replay session.

3. Stop playback.

4. Tap on your newly written notes to play back the audio that you linked while writing the new notes.

**Browsing Paper Replay Sessions**

1. Double-tap the center of the Nav Plus to go to the Main Menu.
2. Tap down to scroll through the applications on your Pulse smartpen until Paper Replay is displayed.

3. Tap right to launch the Paper Replay application menu. Record Session will be the first item.

4. Tap down until you reach Play Session.

5. Tap right to browse sessions.

6. Tap down to scroll through a list of Paper Replay sessions.

   a. Paper Replay sessions are named based on the time and date they are created. For example, if a session is started on
June 03, 2008, at 12:22PM, it will be named and displayed as 06.03.08 12:22p.

**NOTE:** Paper Replay sessions are displayed in the order of most recent with paperless session coming before regular sessions.

7. Tap right to select the session you want to play.

Deleting Paper Replay Sessions

If you wish to delete sessions from your Pulse smartpen for any reason, such as managing memory, we recommend that you transfer your notes to Livescribe Desktop and then delete the older Paper Replay sessions from your Pulse smartpen.

When you delete a session from your Pulse smartpen, your paper notes associated with that file will no longer play back the Paper Replay audio that was associated with that ink. However, as long as you have transferred your notes to Livescribe Desktop, you can continue to replay your notes from your computer.

**NOTE:** You cannot retrieve a session once it has been deleted from both your Pulse smartpen and Livescribe Desktop.

There are three ways to delete Paper Replay sessions from your Pulse smartpen:

- Using the Livescribe Desktop **Remove from Smartpen** command. For more information, see the Livescribe Desktop User Manual located in the Livescribe Desktop Help menu and in your computer’s start menu.

- Archiving your notebook, journal, or other paper product to remove all Paper Replay sessions from your Pulse smartpen for that paper product. See the Livescribe Desktop User Manual for more information.

- Using the Main Menu on your Pulse smartpen, as described below.
To delete Paper Replay sessions from your Pulse smartpen using the Main Menu:

1. Double-tap on the Nav Plus to go to the Main Menu.

2. Tap down to scroll through the applications on your Pulse smartpen until Paper Replay is displayed.

3. Tap right to launch Paper Replay.

4. Tap down to select Delete Session from the menu.

5. Tap right until Select Session is displayed.
6. Tap down to scroll through a list of Paper Replay sessions.

7. Tap right to select the session you want to delete.

8. Tap right to confirm deletion.

Background Recording

With background recording, you can launch and run another Pulse smartpen application while you are using Paper Replay. Paper Replay will continue recording in the background, but no ink is linked to any audio, because the new application you launched is receiving the input from your pen strokes.

The newly launched application has the focus of your Pulse smartpen, and has control of your display and audio output.

If you want to stop or pause recording, or to add new index points to your recording, Paper Replay must be ‘reactivated’ to become the dominant application again.

There are several actions that will cause Paper Replay to ‘snap back’ into control of your Pulse smartpen:
1. Tap on any of the printed Paper Replay controls, or on any Paper Replay notes you have written.

2. Do anything that would normally launch Paper Replay, such as tap in a session region or launch Paper Replay using the Nav Plus.

3. Don’t write or tap anything with your Pulse smartpen for five seconds.

Your Pulse smartpen display will indicate background recording is in effect with a blinking recording dot in the lower right-hand corner of your display.

Note: All recording stops if your Pulse smartpen is turned off or docked.

Using Nav Plus during Paper Replay
While you are recording with Paper Replay you can use the Nav Plus to perform any normal set of functions, such as scrolling through the menus and launching applications.

Sharing your Notes
You can share your notes and Paper Replay sessions online. To learn more about sharing your notes, see Chapter 8: Livescribe Online.
Chapter 5: Pulse Smartpen Settings

Change the settings of your Pulse smartpen using the buttons in the Settings box printed on the inside covers of your notebook.

Time and Date

It is critical that you set the correct time and date on your Pulse smartpen as files you create with your Pulse smartpen are named using the time and date they are created.

Setting the Time

1. Tap the Set Time button with your Pulse smartpen.
2. Tap the printed Settings keypad and enter the time in “hh:mm” format.
3. Tap the “AM” or “PM” button to select AM or PM.
   
   Example: If the time is 12:01PM, tap “1,” “2,” “0,” “1,” and the “PM” button.
4. Your Pulse smartpen will now display the time you entered.

Setting the Date

1. Tap the Set Date button with your Pulse smartpen.
2. Tap the printed keypad and enter the current date in “mm/dd/yy” format.
   
   Example: If the date is January 2, 2009, tap “0,” “1,” “0,” “2,” “0,” “9.”
3. Your Pulse smartpen will now display the date you entered.

TIP: If you make a mistake entering the date or time, simply tap on the Set Date or Set Time buttons again to start over.
Display Settings

Display Brightness

Tap the Display Brightness button on the inside covers of your notebook to select between brightness settings. Tap multiple times to cycle through the three display brightness settings.

TIP: The lowest brightness setting is optimal for dark room environments, such as when a speaker may be presenting a slideshow.

Display Scroll Speed

Text that is too long to fit on your Pulse smartpen display will scroll across the display. You can increase or decrease the rate at which text scrolls using the Scroll Speed settings.

1. To increase the scroll speed, tap the button.

2. To decrease the scroll speed, tap the printed button.

3. Tap until you reach the desired speed, between 1 through 10.

Orienting your Display

Your Pulse smartpen display can be oriented for either left- or right-handed use. Tap the appropriate button to configure your display orientation.

Tap the left-handed button to orient the display for left-handedness.

Tap the right-handed button to orient the display for right-handedness.

Advanced Audio Settings

Menu Voice

Your Pulse smartpen voice audibly announces certain menu items. To turn these audible announcements on or off, use the Menu Voice buttons printed on the inside covers of your notebook in the Settings box.
Turning off the Menu Voice will not affect Paper Replay audio or other Pulse smartpen sounds. For more information on Volume Control, see Chapter 4: Using Paper Replay™.

**Playback Latency**

When you tap your notes to play back a Paper Replay session, the audio will play from a moment five seconds before the note was actually written. This allows you to more accurately replay the moment because there is natural delay between the time when you hear an important point and the time when you begin writing.

Tap the Playback Latency Off button to turn off this latency. You will want do this if you are playing back a recording wherein your audio and writing are perfectly synchronized.

**Audio Quality**

Use the Audio quality setting to change the compression rate of the recorded AAC audio—the higher the audio quality, the lower the compression rate. As a result, files recorded with the highest audio quality setting will be larger files that require more storage space.

1. Tap High to record at the highest audio quality. This setting will require the largest amount of storage space and is optimal for very large environments or when the highest quality recording is required.

2. Tap Medium to return to the default recommended audio quality setting.

3. Tap Low to record at lowest audio quality. This is a memory saving setting that will utilize the least amount of memory and is optimal for dictations or smaller quieter recording environments.

*NOTE:* These settings cannot be changed during recording. Always select the appropriate audio quality setting before beginning a recording.

**Microphone Sensitivity**

You can change the Pulse smartpen microphone sensitivity for different recording situations.

- Tap on Conference Room to set the microphone sensitivity for quieter environments where the person speaking is closer to the microphone. This setting is optimal for dictations, offices, or small conference room settings.

- Tap on Lecture Hall to set the microphone to pick up sounds in a wider open area. This setting is optimal for large rooms where the speaker’s voice is distant from the Pulse smartpen microphone. We also recommend the use of the 3D Recording Headset when recording in this type of environment.
• Tap Automatic to let your Pulse smartpen automatically set your microphone sensitivity based on the noise level of your environment. This is the recommended default setting for your Pulse smartpen.

**Note:** These settings cannot be changed while recording, so always select the appropriate microphone setting before beginning a recording. The microphone will stay set at the last setting you chose, so make sure you set it back to Automatic after each use.
Chapter 6: Additional Pulse Smartpen Applications

Your Pulse smartpen includes a number of applications in addition to Paper Replay. You can also download more applications as they become available from Livescribe.com. The following applications are also included on your Pulse smartpen:

- Calculator
- Time and Date
- Settings
- Quick Commands
- Translator Demo
- Movies

Paper Replay and Settings

To learn how to use Paper Replay and Settings, please refer to Chapter 4: Using Paper Replay.

Calculator

The calculator located on the inside covers of your notebook performs basic math functions, as well as many useful scientific, financial, and statistical functions. To use the calculator, tap on the printed keys with the tip of your Pulse smartpen.
Basic math functions

The calculator displays results and accepts input of numbers up to a length of 11 characters. If a result is longer than 11 digits, it is displayed in exponential notation. You can tap on the key to toggle between positive and negative numbers.

Using basic operators

Basic math operators function like a typical desk calculator. Tap a number, an operator, another number, and an equal sign to see the answer displayed.

If you tap the equal sign directly after the operator, the calculator performs the operation on the initial number that you tapped.

Example: Tap ‘6 x =’. The displayed result is 36.

If you tap more than one operator in a row, only the last operator is kept.

Example: Tap ‘6 x + 4 = ’. The result is 10. The ‘+’ replaces the ‘x’.

If you tap the equal sign repeatedly in succession, it will repeat the previous calculation.

Example: Tap ‘3 + 4 = =’ The initial result is 7. Then, 4 is added to 7 equaling 11.

Using CE/C

Tap the key once to clear the current entry. Tap it twice in a row to clear an entire expression, including any pending operator. The key does not clear values in memory.

Using Parentheses

Normally the calculator respects the standard order of operations in an extended expression. However, you can use parentheses in an expression to control the sequence of execution. Parentheses can be nested in order to further control of the calculation sequence. Each time a close parenthesis is tapped, the result of the enclosed expression is calculated and displayed.

Using Memory

You can store numbers in the memory register. When a value is present in memory an ‘M’ indicator appears. When the value in the memory changes, the indicator on your Pulse smartpen display blinks. When the value in memory is zero, the memory indicator disappears.

M+ Adds the currently displayed value to the value in the memory register.
Subtracts the currently displayed value from the value in the memory register.

Displays the value currently in the memory register.

Sets the memory value to “0”.

Scientific Functions

The Scientific section of the calculator includes several specialized operators and functions.

Operators

For some scientific calculations, you only need to enter a number followed by an operator to obtain a result. These include: %, n!, \( x^2 \), \( \sqrt{x} \), ln, e^x, log, and ln.

When you enter a number followed by one of these keys, the result is displayed immediately.

Example: To square 7, tap ‘7 \( x^2 \)’. The result is 49.

You can use the \( y^x \) key to raise a number y to the power of a number x.

Example: Tap raise 2 to the power of 3, tap ‘2 \( y^x \) 3 ’. The result is 8.

You can use the \( EE^x \) key to enter a value in exponential notation.

Example: To enter 1.23 x 10^-8 enter ‘1.23 \( EE^x \) 8 +/-’. The display shows 1.23e-8. You may now perform calculations on this value.

You can use the \( Rnd \) key to generate a random number between 0 and 1.

Using Trigonometry Functions

Trigonometric calculations such as sine, cosine, and tangent must be made in degree, radian, or gradian mode. The calculator is set to degree mode by default, and returns to degree each time the Pulse smartpen is turned off.

The \( DRG \) key toggles between degree, radian and gradian mode. If you use a trigonometry function, or use the \( DRG \) key to change modes, an indicator of the current mode will appear.
NOTE: The \text{DRG} key cannot be used to convert a completed calculation. It should be used to set the mode before the calculation is begun.

Financial functions
The financial section of the calculator performs Time Value of Money (TVM) calculations for compound interest that involve regular, uniform cash flows.

Using financial functions
A calculation must meet several prerequisites in order to use the financial functions successfully:

- The amount of each payment must be the same.
- Payments must occur at regular intervals.
- The payment period must coincide with the interest compounding period.
- There must be at least one positive and one negative cash flow.

A negative sign in the display represents money paid out; money received is positive.
To set a value for a variable, enter it and then tap the corresponding key. If a value is already present, it is replaced with the new one.

Example: To set the number of payments to 50, tap 50 \text{N}.

To review a previously set value, tap the \text{R/C} key once and then the value key.

To clear all set values, tap the \text{R/C} key twice.

Switch between calculating at the beginning or end of the period by tapping the \text{B+E} key. The calculator defaults to end mode.
To solve for a variable, set known values and then tap the variable for which you wish to solve. All variable values default to zero, except for \text{P/Yr} which defaults to 12.

\begin{itemize}
  \item \text{N}: The number of payments or compounding periods.
  \item \text{I/Yr}: The annual nominal interest rate
  \item \text{PV}: The present value of future cash flows. PV is usually an initial investment or loan
amount. It occurs at the beginning of the first period.

The payment amount. All payments are equal, and none are skipped; payments occur at the beginning or end of each period.

The future value. FV is either a final cash flow or compounded value of previous cash flows. FV occurs at the end of the last period.

Number of payments per year specifies the frequency of the payments.

Beginning and End. Mortgages and loans typically use End mode. Leases and savings plans typically use Begin mode.

Example 1: If you borrow $14,000 for 360 months at 10% interest, what is the monthly payment?

Keys | Display
--- | ---
360 | 360
10 | 10
14000 | 14,000
Pmt | -122.86

Example 2: Using the values just entered (for calculation above), how much can be borrowed if a payment of $100.00 is desired?

Keys | Display
--- | ---
100 +/- | -100.00
PV | 11,395.08
Statistical Functions

The statistical section of the calculator performs mean average and standard deviation calculations for single variable data sets. It also performs permutation and combination calculations.

Using Mean and Standard Deviation Calculations

To use calculate mean and standard deviations, first enter a single variable data set. Enter each value followed by the $\Sigma^+$ key. If you make an error, enter the incorrect value followed by the $\Sigma$ key to remove it from the data set. Values not present in the data set can not be removed. When data is present in the statistical register, a ‘$\Sigma$’ indicator appears. When data is added to or removed from the statistical register the indicator blinks.

Once a data set is entered, you can:

- Tap $S_x$ to calculate the sample standard deviation.
- Tap $\sigma_x$ to calculate the population standard deviation
- Tap $\bar{x}$ to calculate the sample mean.

You can tap $C\Sigma$ to clear the statistical register.

Using Combinations and Permutations

You can use the $n\text{C}r$ key to calculate the number of combinations of $n$ things taken $r$ at a time.

Example: To calculate the number of possible combinations of 24 things taken 6 at a time, enter ‘24 $n\text{C}r$ 6 =’. The display shows a result of 134,596.

You can use the $n\text{P}r$ key to calculate the number of permutations of $n$ things taken $r$ at a time.
Quick Commands

Quick Commands let you write a one-line command with your Pulse smartpen and get an immediate response on your Pulse smartpen display. Quick Commands come in handy when you don’t have access to the Status buttons on the inside cover of your Livescribe notebooks or if you need to do a quick calculation while writing.

The following Quick Commands are currently supported on your Pulse smartpen. As you download additional applications from Livescribe.com, more Quick Commands may become available. Quick Commands are not case sensitive.

Quick Command List

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>battery</td>
<td>Display remaining Pulse smartpen battery power.</td>
</tr>
<tr>
<td>calc</td>
<td>Write and solve a quick calculation.</td>
</tr>
<tr>
<td>storage</td>
<td>Display your remaining Pulse smartpen storage.</td>
</tr>
<tr>
<td>audio</td>
<td>Display your audio quality settings.</td>
</tr>
<tr>
<td>date</td>
<td>Display the current date.</td>
</tr>
<tr>
<td>time</td>
<td>Display the current time.</td>
</tr>
</tbody>
</table>

Battery Quick Command

To view the amount of battery power available on your Pulse smartpen:

1. Double-tap on the center of a Nav Plus.

2. Your Pulse smartpen displays the Quick Command indicator in the Main Menu. It is waiting for you to write a Quick Command.
3. Within five seconds, write the word “battery.”

![Image of battery text]

**NOTE:** With predictive text, your Pulse smartpen will display the first command that matches your written input. In this case, b[attery] is displayed as soon as you write a “b.” As soon as you see the command you want on the display, you can stop writing.

4. Wait briefly or double-tap on the page near where you wrote the command.

5. Your Pulse smartpen will display the remaining battery power.

6. Once you have written a Quick Command, you can tap where you wrote it to repeat the command.
Calc Quick Command

You can use the Calc Quick Command to perform basic mathematical calculations.

1. Double-tap the center of a Nav Plus.

2. Your Pulse smartpen will display the Quick Command indicator in the Main Menu. It is waiting for you to write a Quick Command.

3. Within five seconds, write the word “calc.”

4. Wait briefly or double-tap on the page near where you wrote the command.

5. Your Pulse smartpen will prompt you to write a problem.

6. Write a basic math problem, such as \( 36 \times 7 = \)
7. Your Pulse smartpen will display the result.

8. Once you have written a Quick Command, you can tap where you wrote it to repeat the command.

Guidelines for writing a math problem:

- Numbers can contain up to 12 characters, including a decimal point.
- Operators can include +, -, ×, *, /, and ÷.
- A double-tap can be used in place of the equals sign.

Example: 52 - 14 followed by a double-tap is an accepted entry.

- If the length of the math problem exceeds the screen size, the beginning of the problem scrolls off the left of the screen as new characters are added to the right.

Storage Quick Command
To display the amount of available memory on your Pulse smartpen:

1. Double-tap on the center of a Nav Plus.
2. Your Pulse smartpen will display the Quick Command indicator in the Main Menu. It is waiting for you to write a Quick Command.

3. Within five seconds, write the word “storage.”

NOTE: With predictive text, your Pulse smartpen will display the first command that matches your written input. In this case, s[orage] is displayed as soon as you write a “s.” As soon as you see the command you want on the display, you can stop writing.

4. Wait briefly or double-tap on the page near where you wrote the command.

5. Your Pulse smartpen will display the available memory.
   a. If available space is less than 1 MB, your Pulse smartpen will display memory in available KB.
6. Once you have written a Quick Command, you can tap where you wrote it to repeat the command.

Audio Quick Command
To display the status of audio settings on your Pulse smartpen:

1. Double-tap on the center of a Nav Plus.

2. Your Pulse smartpen will display the Quick Command indicator in the Main Menu. It is waiting for you to write a Quick Command.

3. Within five seconds, write the word “audio.”

NOTE: With predictive text, your Pulse smartpen will display the first command that matches your written input. In this case, a[udio] is displayed as soon as you write “a.” As soon as you see the command you want on the display, you can stop writing.
4. Wait briefly or double-tap on the page near where you wrote the command.

5. Your Pulse smartpen will display the audio settings.

   **NOTE:** To change audio settings, refer to Chapter 5: Pulse Smartpen Settings.

6. Once you have written a Quick Command, you can tap where you wrote it to repeat the command.

---

**Time & Date Quick Command**

You can use Quick Commands to check the time or date, in addition to using the printed controls on the inside cover of your notebook or on the Livescribe sticker sheet.

1. Double-tap on the center of a Nav Plus.

2. Your Pulse smartpen will display the Quick Command indicator in the Main Menu. It is waiting for you to write a Quick Command.
3. Within 5 seconds of double-tapping, write either “time” or “date.”

**TIP:** With predictive text, your Pulse smartpen will display the first command that matches your written input. In this case, d[ate] or t[ime] is displayed as soon as you write a “d” or “t.” As soon as you see the command you want on the display, you can stop writing.

4. Wait briefly or double-tap on the page near where you wrote the command.

5. Your Pulse smartpen will display the date or time.

6. Once you have written a Quick Command, you can tap where you wrote it to repeat the command.

In addition to the Quick Command, there are three other methods of checking the current Time & Date.

- Tap on the printed controls on the inside cover of your notebook under Status.
• Tap on the Time & Date Interactive Controls on the sticker sheet.

• Select the Time & Date application with the Nav Plus:
  1. Double-tap on the center of a Nav Plus.
  2. Scroll down with Nav Plus until Time or Date is visible on the display.
  3. Tap right to select Time or Date.
4. Your Pulse smartpen will display the current Time or Date.

**TIP:** To set current Time & Date refer to Chapter 2: Using Your Pulse Smartpen.

**Movies**

Included on your Pulse smartpen are several short animated movies that showcase the 3D audio on your Pulse smartpen. To play movies:

1. Insert the 3D Recording Headset into your ears.

2. Double-tap the center of a Nav Plus to go the Main Menu.

3. Tap down until Movie is displayed.

4. Tap right to select Movies.
5. Tap down to Movies.

6. Tap right to select the movie you wish to play. The movie will play back in your Pulse smartpen display.

**TIP:** Movies are also included on your Demo Card and Interactive Controls sticker sheet.

**Translator demo**

With the Translator Demo, you can translate a small set of words and the numbers zero to nine from English into Spanish, Swedish, Arabic, or Mandarin. By writing a word in English in your notebook, you can see and hear correct translation from your Pulse smartpen.

**Translator demo Word List**

<table>
<thead>
<tr>
<th>Zero</th>
<th>Seven</th>
<th>Thanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Eight</td>
<td>Beer</td>
</tr>
<tr>
<td>Two</td>
<td>Nine</td>
<td>Banana</td>
</tr>
<tr>
<td>Three</td>
<td>Ten</td>
<td>Goodbye</td>
</tr>
<tr>
<td>Four</td>
<td>Hello</td>
<td>Thank you</td>
</tr>
<tr>
<td>Five</td>
<td>Please</td>
<td>Coffee</td>
</tr>
<tr>
<td>Six</td>
<td>Chocolate</td>
<td>Water</td>
</tr>
</tbody>
</table>
To Launch Translator Demo

There are three ways to launch the Translator Demo.

Using Nav Plus

1. Double-tap the center of a Nav Plus to get to the Main Menu.

2. Tap down to scroll to the Translator Demo.

3. Tap right to launch the Translator Demo menu.

4. Tap down to scroll through available languages.

5. Tap right to select a language.
6. Write a word to translate. You can write in upper- or lower-case letters.

**NOTE:** When a language is displayed on your Pulse smartpen screen, the translator demo is automatically switched into that mode, whether you tap right or not.

**Using a Word Button**

Once you write a word and have it translated, the word you wrote becomes an active ‘button’ you can tap on at any time to launch Translator Demo. Once launched, Translator will translate that word again into any of the Translator languages. For example, if you write ‘beer’ and translate it into Spanish, you will hear and see the Spanish translation of the word ‘beer.’

Later, you can return to the English word ‘beer’ that you wrote and receive the translation in Mandarin, Swedish, or Arabic.

**Using the Demo Card**

The back of the Demo Card includes the following translation buttons:

- English -> Spanish
- English -> Arabic
- English -> Mandarin
- English -> Swedish
To use the Demo Card:

1. Tap one of the language translation buttons to launch the Translator Demo into that language.

2. Write one of the words on the word list on dotted paper.

3. You will see the word translated into the current language.

4. Tapping on a previously created word button will translate into the currently selected language. If you select Arabic and tap 'Beer,' you will receive the Arabic translation.

**Piano**

With Piano, you can draw a piano on your dotted paper and play music with your Pulse smartpen. You can change the sound of your piano, add rhythm tracks, and add sharp and flat notes.
Launching Piano

1. Double-tap the center of the Nav Plus to reach the Main Menu.

2. Tap down to scroll through the Pulse menu until Piano is displayed.

3. Tap right to select Piano.

**TIP:** Tip: You can also start Piano by tapping on the Piano button on your Demo Card.

Drawing Your Piano

1. From left to right, draw 9 parallel vertical lines. Your Pulse screen will display a blinking line to indicate which line you should draw next.
2. Connect the 9 parallel lines with horizontal lines at the top and bottom.

3. Write the letter “i” and double-tap near it. This is your instrument button.

   Tap the “i” button repeatedly to select one of the seven instruments: Grand Piano, Vibraphone, Kalimba, Steel Drum, Fiddle, Flute, or Celeste.

   Tap on your keyboard when the first letter of the instrument you want to play is displayed on your Pulse screen.

4. Write the letter “r” and double-tap near it. This is your rhythm tracks button.

   Tap the “r” button repeatedly to cycle through the five rhythm track options.

To turn rhythm track off:

a. Tap left on the Nav Plus. Your Pulse will display “Rhythms OFF.” Tap right on the Nav Plus to stop the rhythm track.

   OR

b. Tap the “r” button to cycle through the rhythm tracks until no track plays.
Adding Sharps and Flats

1. Tap left on the Nav Plus. Your Pulse will display Rhythms OFF.

2. Tap down to reach Add sharps and Flats.

3. Tap right to Add Sharps and Flats.

4. Your Pulse will display blinking rectangles on your piano. Draw rectangles after the 2nd, 3rd, 5th, 6th, and 7th piano key lines, as in the display.

Piano tips
Use the stylus to play your piano, rather than the ink cartridge. This will keep the paper free and clear of ink marks.
Chapter 7: Livescribe Desktop

For the complete Livescribe Desktop User Manual, check the Help Menu of the Livescribe Desktop toolbar.

Livescribe Desktop enables you to create and store a searchable library of all your Pulse smartpen-created content, from Art to Zoology. From Livescribe Desktop, you can transfer your content directly to your personal myLivescribe user profile on Livescribe Online and upload copies of your notes to browse and share as pencasts. Livescribe Desktop will also let you install and uninstall applications to and from your Pulse smartpen.

Livescribe Desktop Features

- Play back audio of Paper Replay notes and see the ink animate as it was written.
- View notes as a single page or as multiple thumbnail pages from one notebook.
- Search pages for words you have written.
- Control audio as you would in your notebook, with a control bar.
- Zoom into sections of a page for closer inspection.
- Manage the installation of applications on your Pulse smartpen.
- View all the application currently on your Pulse smartpen.
- Jump to your personal myLivescribe profile on Livescribe Online.
- Upload content to your myLivescribe profile.
- Associate multiple Pulse smartpens to your Livescribe Desktop software.

Installing Livescribe Desktop

Livescribe Desktop requires a Windows PC running either Windows XP SP2 or Windows Vista. Your computer will also need:

- a 600MHz CPU or higher
- 512 MB RAM
To install Livescribe Desktop:

1. Verify that your computer meets the software and hardware requirements for Livescribe Desktop.
3. Follow the on-screen instructions to complete the installation.

Running Livescribe Desktop

1. On your desktop, double-click the Livescribe Desktop shortcut or go to Start > Programs > Livescribe > Livescribe Desktop.
2. Dock your Pulse smartpen to your computer using the USB cradle. Docking will automatically transfer content to Livescribe Desktop.

**IMPORTANT:** Once docked, do not remove your Pulse smartpen from the cradle until the content transfer is complete. Livescribe Desktop will display a message and audio cue confirming the transfer was successful.

Registering Your Pulse Smartpen

If you have not registered your Pulse smartpen with Livescribe, you will be prompted to do so by Livescribe Desktop.

- On the Create a New Account dialog, enter your email address and a password and click Next. Livescribe Desktop will connect you with Livescribe Online to complete the registration process.

Registration extends your warranty from 90 days to one year from the date of purchase. Once you register, you can upload notes to and download applications from Livescribe Online.
Chapter 8: Livescribe Online

Livescribe Community

At the Livescribe community, you can check out what others are doing and post your own creations for others to rate and comment on.

Featured Files
Livescribe will randomly choose files to be featured on the front page of the Community area.

Just Added
This section of the Livescribe Community page shows the most recently added content. Clicking on the Just Added item takes you to the content creator’s myLivescribe page.
Featured Contributors
This section of the Community page highlights members of the Livescribe Community who provide the most, and highest-rated, submissions.
Click on a Featured Contributor to go their myLivescribe profile.

Top Rated
This section shows the top-rated content in the Livescribe Community.

Most Viewed
This section of the Community Page shows visitors which content has been viewed the most.

Your myLivescribe Profile
Expand the world of your Pulse smartpen by creating your own myLivescribe profile on the Livescribe Online community, where you can upload and store notes and content to share with your friends, the community, or anyone on the Web.

Creating your myLivescribe space:

1. Go to Livescribe Online community page either through the link in your Livescribe Desktop or by pointing your Web browser to Livescribe.com.
2. Choose ‘Sign up.’

3. Choose a username and password. The username must consist of a name and email address.

Using your myLivescribe profile
When you create a myLivescribe user profile, you’ll receive space to store and share notes and drawings. On your myLivescribe profile page you’ll see a list of sharing options, viewer comments, and how much space you have used and you have available.

Managing Your Account Details

Create or change your user name by selecting it and editing in place.

Edit Login and Password in this field.

Unlink your Pulse smartpen from your account by clicking on the My Smartpens field and deleting the desired Pulse smartpen.

Upload an Avatar

Managing Account Content

Rename files by selecting the filename and editing it in place.

Delete files by clicking on the X icon next to the file name.

NOTE: This does not remove the files from your Livescribe Desktop application or your Pulse smartpen, only from your online account. To remove files from your
Add/Edit file descriptions

You can add short descriptions of your uploaded files by clicking on the “description” field and typing a name into the text field.

Edit existing descriptions by clicking on the existing description and typing into the text field.

Choose categories for files

Choose a category in which to place your file by clicking on the category button in the description area and choosing one of the pre-defined categories.

Sharing Files

Share your files with everyone or with specified recipients.

NOTE: When you upload your Pulse smartpen content to your personal profile, it automatically defaults to private.

Contact Lists

You can use your contact list for quick sharing:

1. Click on ‘Sharing’ on your myLivescribe page.
2. Type a nickname and email address into the ‘add new contact’ field.
3. Drag a contact into the drag contact box.
4. To edit a contact, remove the contact completely with the Remove button. Re-enter the contact with updated information.

Livescribe Store

At the Livescribe Online store at www.livescribe.com you can purchase additional pens, paper products, applications, and more.

At checkout, you’ll need to log into your account, or create an account if you haven’t already.
Chapter 9: Accessories & Supplies

Included Accessories

Your Pulse smartpen comes with everything you need to record audio linked to written notes and create 3D audio recordings.

3D Recording Headset

To learn about the binaural recording capabilities of the 3D Recording Headset, refer to Chapter 1: Introducing the Pulse™ Smartpen.

Using the Neckstrap

In certain situations, you might not want to wear your earbuds in your ears. In these cases, use the neckstrap to record.

1. Lift the wire away from the earbud stem.

2. Slide the end of the neckstrap over the stem.
3. Place the neckstrap around your neck, with the earbuds resting on your body.

**TIP:** Keep the earbuds about 6-8 inches apart to mimic the position of your ears.

**USB Mobile Charging Cradle**

Your USB mobile charging cradle charges your Pulse smartpen when it is connected to a computer. The Nav Plus located on the cradle will let you navigate your Pulse smartpen menu and functionalities when Livescribe dot paper is not available. The cradle will also help you to replace spent ink cartridges.

**Replacing the ink cartridge:**

1. Insert your Pulse smartpen ink tip into the ink cartridge removal ring.

2. Tilt your Pulse smartpen so that it firmly rests against the removal ring.
3. The ink cartridge removal ring is also located on the back end of the carry all soft case.

**Stylus Option**

If you want to use your Pulse smartpen but don't want to make ink marks on your paper, use the included stylus. To insert the stylus, follow the steps in *Replacing the Ink Cartridge* but substitute the stylus for the replacement ink cartridge.

**Carry All Soft Case**

The Carry all soft case included with your Pulse smartpen provides protection and functionality.

1. Ink Replacement Ring
2. Headset management band
3. Ink storage
4. Nav Plus (navigation controller)
Ink Replacement

Use the tip of the case to replace ink cartridges or insert the stylus.

Headset Management

Simply snap your Pulse smartpen into its case and wrap your 3D Recording Headset around the case. An elastic band is included so that you can keep your earbuds in place.

Ink Storage

Store up to two extra ink cartridges, or an ink cartridge and a stylus, in the side pockets of your case.

Nav Plus label

Use this flap as you would any Nav Plus. This flap can be wiped clean with alcohol to remove any residual ink.
Display Window
Check your display without removing your Pulse smartpen from its case.

Interactive Control Sticker Sheet
The included interactive control sticker sheet included in your Pulse smartpen package contains stickers printed with control buttons associated with applications on your Pulse smartpen. You can stick these anywhere and use them to perform functions with your Pulse smartpen even if you don’t have your notebook with you.

Demo Card
This Demo Card showcases the translator demo application and the capabilities of your 3D Recording Headset. Tap on the printed controls to explore the demo card content.
Purchase more accessories at the Livescribe Online store at www.livescribe.com.
Chapter 10: Product Safety and Maintenance

WARNING: FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS COULD RESULT IN FIRE, ELECTRIC SHOCK, OR OTHER INJURY OR DAMAGE

Product Safety Information

The Pulse smartpen may be damaged by improper handling or storage. Do not drop, throw, bend, crush, deform, puncture or open the Pulse smartpen. Failure to follow these instructions could result in electric shock, fire, personal injury or property damage, or damage to the Pulse smartpen as well as voiding your limited warranty.

- Do not drop the Pulse smartpen or allow any other kind of strong impact, which can severely damage it or prevent it from working properly.

- Do not open or disassemble the Pulse smartpen for any reason. There are no serviceable components.

- Do not expose the Pulse smartpen to water or any other liquids. It is not waterproof or water resistant. Do not leave it in damp conditions.

- Do not attempt to charge the Pulse smartpen via any other means other than the USB cradle provided.

- Do not attempt to access the battery. The rechargeable battery is not accessible and is not intended to be removed, replaced or touched. The battery contents can be hazardous if ingested. The battery technology is combustible and only chemical fire retardants or sand should be used to extinguish flames. Do not use water.

- If the battery leaks, do not allow the liquid to come in contact with the skin or eyes. If it does come in contact with skin or eyes use large amounts of water to wash the affected area and immediately seek medical advice.

- Do not dispose of the Pulse smartpen in a fire, as the battery may explode or flame.

- Only use Livescribe-approved ink cartridges.

- **WARNING: DO NOT MAKE ANY REPAIRS YOURSELF. DO NOT attempt to open the Pulse smartpen, disassemble it, remove the battery or attempt to replace the battery yourself. This runs the risk of electric shock, fire, personal injury or property damage, and voiding the limited warranty.**
Maintaining Your Pulse Smartpen

It is essential that you take proper care of your Pulse smartpen to ensure its durability. Here are our guidelines for ensuring it has a lengthy lifespan:

- Always store the Pulse smartpen in its protective case when not in use.
- Do not store the Pulse smartpen in extreme high or low temperatures. Store it in a cool, dry place.
- Keep the Pulse smartpen charged.
- Do not attempt to charge the Pulse smartpen via any other means other than the USB cradle provided.
- Use a soft cloth for general cleaning.
- Keep food and any liquids away from the Pulse smartpen. It is not waterproof. Do not leave it in damp conditions.
- Do not drop or throw the Pulse smartpen or allow any other kind of strong impact, which can severely damage it and prevent it from working properly.
- Transfer your important notes and Paper Replay sessions from your Pulse smartpen to your Livescribe Desktop often so that you have a backup copy on your computer, and backup your computer.
- Do NOT open the Pulse smartpen for any reason. There are no user-serviceable components inside and any attempt to open your Pulse smartpen will void the warranty.
- Do not place your Pulse smartpen in any area where it could be crushed (i.e. back pocket, bottom of backpack, etc.)

- **WARNING:** DO NOT MAKE ANY REPAIRS YOURSELF. DO NOT attempt to open the Pulse smartpen, disassemble it, remove the battery or attempt to replace the battery yourself. This runs the risk of electric shock, fire, personal injury or property damage, and voiding the limited warranty.

Resetting Your Pulse Smartpen

If for some reason your Pulse smartpen is unresponsive, first try charging it to make sure it has power. If your Pulse smartpen is still nonresponsive after 5 minutes of charging, you may need to reset it. To do this, press and hold the power button for 10 seconds. Previously saved data will not be lost.
**Cleaning Your Pulse Smartpen**

If your Pulse smartpen appears sluggish or non-responsive when you interact with printed controls, the infrared lens at its tip may be dirty. Clean your IR lens with an alcohol wipe. Clean the exterior of your Pulse smartpen with a clean, soft cloth dampened slightly with water.

**Disposal**

Do not dispose of this product in the trash. As with any product containing batteries, check with your local waste or recycling company to determine the correct disposal method and location in your area.

**Hearing Notice**

Long-term exposure to the playback of loud recordings, at high volume, may result in permanent hearing loss. When using earbuds or headphones, it is recommended that recordings are listened to at moderate volumes. Set the volume to a safe level. A rule of thumb is that the recorded audio should not be so loud that you cannot hear people speaking to you.
Chapter 11: Getting Help

Contacting Customer Service

On the Livescribe Support page you’ll find several ways to get answers to any questions you might have about your Pulse smartpen or other Livescribe products.

Web-based knowledgebase
Browse our knowledgebase to find many of the answers to your questions. The knowledgebase is updated constantly, so check it each time you need help.

Web-based forum
Other Pulse smartpen users may have found an answer to your question. Check the forums to post a question or browse similar questions and find responses that may help you.

Response form
Fill out the Livescribe Customer Service Response form with any issues, comments, or recommendations.
Chat
Chat via instant message with a friendly Livescribe customer support specialist.

Phone
1-877-SCRIBE9 (877-727-4239)

Returns

Items purchased directly from Livescribe
Items purchased directly from Livescribe will have the following return timeframe to qualify for a refund. Items returned after this timeframe will not be accepted or credited:

- Hardware: 30 days.
- Software: 15 days.
- Accessories: 30 days.
- 3rd party: 15 days

Returned item refund

Purchased directly from Livescribe
Livescribe will refund the full amount paid minus shipping on any item(s) returned within the allowable time. The customer must contact Customer Service for a Returned Material Authorization (RMA) number and is responsible for the original shipping and the return shipping fees.

A returned item must be returned in like-new condition with all the original components and packaging. Credits are issued once the item(s) have been received and verified.

Purchased from 3rd party
The time period is based on sales agreement and 3rd party policy.
Chapter 12: Regulatory Information

US FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may violate FCC rules. Shielded I/O cables are available for the Pulse Smartpen from Livescribe.

IMPORTANT: Changes or modifications not covered in this manual must be approved in writing by the manufacturer’s Regulatory Engineering Department. Changes or modifications made without written approval may void the user’s authority to operate this equipment.

Responsible Party:
Livescribe Inc
7677 Oakport Street, 12th Floor
Oakland, CA  94621
United States of America
(510) 777-0771
Canadian, Industrie Canada ICES-003 Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

CE Declaration of Conformity

Manufacturer and EU Responsible Party:
Livescribe Inc
Address: 7677 Oakport Street, 12th Floor
Oakland, CA 94621
United States of America
(510) 777-0771

This product was tested by Livescribe, Inc. and found to comply with all the requirements of the EMC Directive 2004/108/EC and of the LVD Directive 2006/95/EC.

This device conforms to the following standards:
EN 55022 (1998); CISPR 22 as amended, (Class B Radiated and Conducted Emissions)
EN 55024 (1998); CISPR 24 as amended, (Emissions and Immunity, as applicable)
IEC 60950-1, First Edition
EN 60950-1, First Edition

ROHS Compliance Statement

LiveScribe has determined that this product complies with the requirements of the Restriction of Hazardous Substances (ROHS) directive 2002/95/EC and its amendments. For additional information, contact Livescribe at the address above.

UL

Use only with Listed ITE.
This device conforms to the following standards:
UL60950-1, First Edition

Battery Warning

Do not mutilate, puncture, or dispose of batteries in fire. The batteries can burst or explode, releasing hazardous chemicals. Discard used batteries according to the manufacturer’s instructions and in accordance with your local regulations.

Warning

Advarsel!
Lithiumbatteri—Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af same fabrikat og type. Levér det brugte batteri tilbage tilleverandøren.

Varoitus

Advarsel

Waarschuwing!
Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

Static Electricity, ESD, and Your Pulse™ Smartpen

Electrostatic discharge (ESD) can cause damage to electronic devices if discharged into the device, so you should take steps to avoid such an occurrence.
Description of ESD
Static electricity is an electrical charge caused by the buildup of excess electrons on the surface of a material. To most people, static electricity and ESD are nothing more than annoyances. For example, after walking over a carpet while scuffing your feet, building up electrons on your body, you may get a static shock—the discharge event—when you touch a metal doorknob. This little shock discharges the built-up static electricity.

ESD-susceptible equipment
Even a small amount of ESD can harm circuitry, so when working with electronic devices, take measures to help protect your electronic devices, including your Livescribe™ smartpen, from ESD harm. While Livescribe has built protections against ESD into its products, ESD unfortunately exists and, unless neutralized, could build up to levels that could harm your equipment. Any electronic device that contains an external entry point for plugging in anything from cables to docking stations is susceptible to entry of ESD. Devices that you carry with you, such as your handheld, build up ESD in a unique way because the static electricity that may have built up on your body is automatically passed to the device. Then, when the device is connected to another device such as a docking station, a discharge event can occur.

Precautions against ESD
Make sure to discharge any built-up static electricity from yourself and your electronic devices before touching an electronic device or connecting one device to another. The recommendation from Livescribe is that you take this precaution before connecting your smartpen to your computer, placing the smartpen in a cradle, or connecting it to any other device. You can do this in many ways, including the following:

- Ground yourself when you’re holding your mobile device by simultaneously touching a metal surface that is at earth ground. For example, if your computer has a metal case and is plugged into a standard three prong grounded outlet, touching the case should discharge the ESD on your body.

- Increase the relative humidity of your environment.

- Install ESD-specific prevention items, such as grounding mats.

Conditions that enhance ESD occurrences
Conditions that can contribute to the buildup of static electricity in the environment include the following:

- Low relative humidity.
• Material type. (The type of material gathering the charge. For example, synthetics are more prone to static buildup than natural fibers like cotton.)

• The rapidity with which you touch, connect, or disconnect electronic devices.

• While you should always take appropriate precautions to discharge static electricity, if you are in an environment where you notice ESD events, you may want to take extra precautions to protect your electronic equipment against ESD.

Warranty Information

LIMITED WARRANTY. Livescribe warrants the Pulse smartpen to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of original direct or retail purchase. This warranty is void if the product has been damaged by accident or unreasonable use, immersion in water, neglect, abuse, improper maintenance, our other causes not arising out of defects in workmanship or materials of the product. All warranty claims are subject to: (1) you notifying Livescribe of the warranty claim within the warranty period, (2) Livescribe verifying the existence of a defect in the product and (3) receipt of valid proof of your purchase and the date of your purchase. Your exclusive remedy shall be, at Livescribe's option, to have it repaired or receive a replacement Pulse smartpen. Before returning the Pulse smartpen, please contact the Livescribe Customer Service Department for instructions.

In the event that a product under warranty is repaired or replaced, the replacement will be covered under the original warranty or for 30 days, whichever is longer. Repair or replacement is your exclusive remedy, and Livescribe’s exclusive liability, under this warranty. THE LIMITED WARRANTY SET FORTH HEREIN IS THE ONLY WARRANTY MADE TO YOU AND IS PROVIDED IN LIEU OF ANY OTHER WARRANTIES (IF ANY) CREATED BY ANY DOCUMENTATION OR PACKAGING. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS.

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Chapter 13: Glossary

3D Recording Headset—Earphones with embedded microphones that capture multi-directional, far-field audio and place objects in the sound landscape surrounding you.

Livescribe Desktop—The computer component of the Livescribe platform. Livescribe Desktop that allows you to transfer, store, search, and replay notes from your computer. You can also upload your content to the Web, and manage applications and content on your Pulse smartpen.

Livescribe Online—The web community of Livescribe Pulse smartpen users who post and share Pulse smartpen content.

myLivescribe profile—250MB of personal space a Livescribe Pulse smartpen user is allotted at Livescribe Online to store and share notes.

Livescribe dot paper—Plain paper printed with microdots the Pulse smartpen reads.

Nav Plus—A pre-printed or hand-drawn plus sign that lets you navigate your Pulse smartpen applications and files.

OLED Display—18pixel x 98pixel Organic Liquid Crystal Diode display screen of your Pulse smartpen.

Paper Replay—An application that links what you write to audio recordings. Later, tap on the notes you wrote to hear what was said when you wrote them.

Quick Commands—A series of commands you can write on dotted paper to quickly learn the current status of your Pulse smartpen.

Quick Record—A method of quickly recording with your Pulse smartpen. Activate Quick Record by pressing and holding your Pulse smartpen power button for two seconds.

USB Mobile Charging Cradle—The included cradle that charges and connects your Pulse smartpen to your computer.