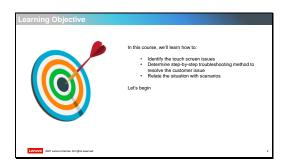
Smarter technology for all

Touch screen Issues

Participant Guide



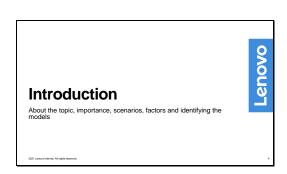
Welcome again!! We all have used laptops. At some times, the system touch screen may not work properly.



In this course, we'll learn how to

- Identify the touch screen issues
- Determine a step-by-step troubleshooting method to resolve the customer issue
- Example of scenarios

Let's begin





You will come across 2 key components in this module.

They are

- ✓ Touch Screen
- ✓ Active Pen

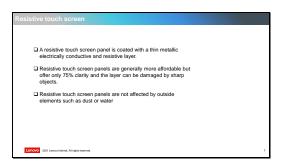
Before we jump into our topic, let's see what is touch screen and active pen



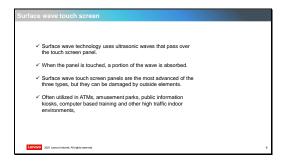
A touch screen is a computer display screen that is also an input device. The screens are sensitive to pressure; a user interacts with the computer by touching pictures or words on the screen.

There are three types of touch screen technology:

- Resistive
- Surface wave
- Capacitive

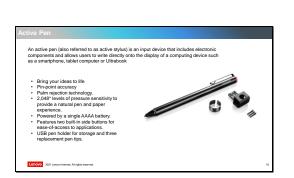


- □ A resistive touch screen panel is coated with a thin metallic electrically conductive and resistive layer.
- □ Resistive touch screen panels are generally more affordable but offer only 75% clarity and the layer can be damaged by sharp objects.
- □ Resistive touch screen panels are not affected by outside elements such as dust or water



A capacitive touch screen panel is coated with a material that stores electrical charges. When the panel is touched, a small amount of charge is drawn to the point of contact.

Capacitive touch screen panels must be tou



✓ Surface wave technology uses ultrasonic waves that pass over the touch screen panel.

- ✓ When the panel is touched, a portion of the wave is absorbed.
- ✓ Surface wave touch screen panels are the most advanced of the three types, but they can be damaged by outside elements.
- Often utilized in ATMs, amusement parks, public information kiosks, computer based training and other high traffic indoor environments,
- A capacitive touch screen panel is coated with a material that stores electrical charges. When the panel is touched, a small amount of charge is drawn to the point of contact.
- Capacitive touch screen panels must be touched with a finger unlike resistive and surface wave panels that can use fingers and stylus.
- Capacitive touch screens are not affected by outside elements and have high clarity

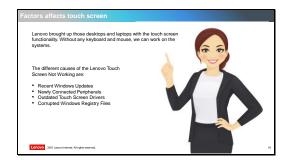
An active pen (also referred to as active stylus) is an input device that includes electronic components and allows users to write directly onto the display of a computing device such as a smartphone, tablet computer or Ultrabook

- Bring your ideas to life with the Lenovo Active Pen.
- This pen boasts pin-point accuracy, palm-rejection technology and 2,048* levels of pressure sensitivity to provide a natural pen and paper experience when you sketch and jot down notes.
- It is powered by a single AAAA battery, the Lenovo Active Pen also features two built-in side buttons for ease-of-access to applications, a USB pen holder for storage, and three replacement pen tips for longer use.



The touch screen issues have 3 scenarios as follows:

- 1. Complete Touchscreen not working
- 2. Some portion of the touchscreen not working
- 3. Malfunctioning of Touchscreen



Lenovo brought up those desktops and laptops with the touch screen functionality. Without any keyboard and mouse, we can work on the systems.

Regardless of its popularity, the user can face a few kinds of errors while working with Lenovo products. While using touch screen devices, sometimes, it will not work properly.

As many users face these touch screen issues with Smartphones, the PC and laptop users can encounter this issue. When the touch screen does not work, it will not show any results according to our requests.



Now let's see some models that are shipped with touchscreen

Please remember All Yoga, 360 degrees Convertible Models, Yoga Home and AlO systems are shipped with touch feature. Also note that the touchscreen feature in AlO is optional. To check whether any AlO system is shipped with a touchscreen feature, please refer POR or LCD description.

Let's see some more touch model laptops





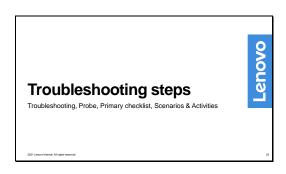




Now let's see the video and understand different modes in Yoga models

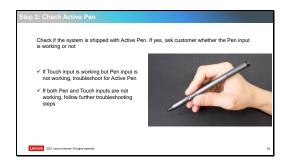


Let's watch video about the different modes in touch screen laptops





- No Pen or Touch Input is available for this Display means the LCD is not touch screen.
- Full Windows Touch Support with 10 Touch Points means the LCD is touch screen (the description will vary on different hardware).



Check if the system is shipped with Active Pen. If yes, ask customer whether the Pen input is working or not

- ✓ If Touch input is working but Pen input is not working, troubleshoot for Active Pen
- ✓ If both Pen and Touch inputs are not working, follow further troubleshooting steps



Touch screens might not respond due to smudges and dirt buildup. Gently wipe the screen with a soft, moisten, clean cloth with water.



- One of the best ways to get the most out of your PC is to make sure you have the latest version of Windows installed.
- When you check for updates, your PC will also search for the latest device drivers, which can also help improve your PC's performance.



- Your touch screen might not respond because it is not enabled or needs to be reinstalled.
- You can use Device Manager to enable and reinstall the touch screen driver.

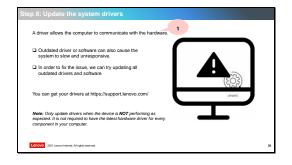


You can configure the touch display to identify your screen as a touch screen from PC settings.



You can calibrate the touch display to identify your screen as a touch screen from PC settings.

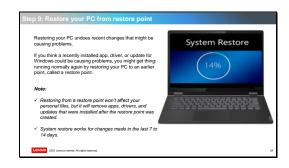
In the next slide, you will see an example of calibrating the display.



For example, a USB flash drive is a physical device that, when plugged into a computer, needs to "talk" with the computer to function.

Drivers in the computer, specifically for the USB, communicate and operate the USB.

- Outdated driver or software can also cause the system to slow and unresponsive.
- ☐ In order to fix the issue, we can try updating all outdated drivers and software

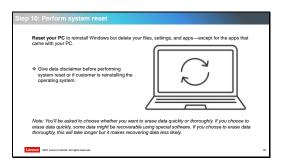


Restoring your PC undoes recent changes that might be causing problems.

If you think a recently installed app, driver, or update for Windows could be causing problems, you might get things running normally again by restoring your PC to an earlier point, called a restore point.

Note:

- Restoring from a restore point won't affect your personal files, but it will remove apps, drivers, and updates that were installed after the restore point was created.
- ✓ System restore works for changes made in the last 7 to 14 days.



Reset your PC to reinstall Windows but delete your files, settings, and apps—except for the apps that came with your PC.

Give data disclaimer before performing system reset or if customer is reinstalling the operating system.

Note: You'll be asked to choose whether you want to erase data quickly or thoroughly. If you choose to erase data quickly, some data might be recoverable using special software. If you choose to erase data thoroughly, this will take longer but it makes recovering data less likely.

