

Touch Device Driver

Installation Guide



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1 INTRODUCTION

1.1 Copyright

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1.2 FCC Notice

Touch

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.

TouchX

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.

1.3 Compliance

Touch

This equipment conforms with EN 61326-1:2013, IEC 61000-3-2:2014, IEC 61000-3-3:2013, and EN 60950-1:2006 (Second Edition) +A11:2009 +A1:2010 +A12:2011 +A2:2013 and meets the requirements of the applicable EU Directives.

TouchX

This section is not applicable for the TouchX as it is a Class B device.

1.4 Warranty

No warranties of any kind are created or extended by this publication. 3D Systems warrants that the Touch and TouchX haptic device will be free from defects in materials and workmanship, during the applicable warranty period, when used under the normal conditions described in the documentation provided to you, including the respective User Guide. 3D Systems will promptly repair or replace the Touch or TouchX, if required, to make it free of defects during the warranty period. This warranty excludes repairs required during the warranty period because of abnormal use or conditions (such as riots, floods, misuse, neglect or improper service by anyone except 3D Systems or its authorized service provider). The warranty period for the Touch and TouchX is twelve (12) months and shall start the date your device is purchased. For consumers who are covered by consumer protection laws or regulations in their country of purchase or, if different, their country of residence, the benefits conferred by our standard warranty are in addition to, and operate concurrently with, all rights and remedies conveyed by such consumer protection laws and regulations, including but not limited to these additional rights.

THIS WARRANTY IS THE ONLY WARRANTY PROVIDED FOR THE TOUCH AND TOUCHX DEVICES. TO THE MAXIMUM EXTENT PERMITTED BY LAW, 3D SYSTEMS EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES FOR THE TOUCH DEVICE AND EACH OF ITS COMPONENTS, WHETHER THOSE WARRANTIES ARE EXPRESS, IMPLIED OR STATUTORY, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR INTENDED OR PARTICULAR PURPOSES.

1.5 Limitation of Liability

3D SYSTEMS WILL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES (SUCH AS LOSS OF PROFIT OR EMPLOYEE'S TIME) REGARDLESS OF THE REASON. IN NO EVENT SHALL THE LIABILITY AND/OR OBLIGATIONS OF 3D SYSTEMS ARISING OUT OF THE PURCHASE, LEASE, LICENSE AND/OR USE OF THE EQUIPMENT BY YOU OR OTHERS EXCEED THE PURCHASE PRICE OF THE TOUCH OR TOUCHX DEVICE.

2 GETTING STARTED

2.1 Overview

Congratulations on your purchase of the 3D Systems Touch haptic device!

This guide covers information about the 3D Systems Touch haptic device. The information contained in this manual was current at the time of publication. Visit <https://softwaresupport.3dsystems.com> for the latest information.

This chapter describes the following:

- About this guide
- What comes with your device
- The 3D Systems Touch haptic device features
- System requirements

2.2 About This Guide

The 3D Systems Touch Device Guide describes the process of installing the required device drivers for your new 3D Systems haptic device and connecting the hardware device to your computer. You will also find information on how to use the device and other information about the device.

For the most current device information please visit the Geomagic website at:

<https://softwaresupport.3dsystems.com>.

We've worked extensively to ensure that the 3D Systems haptic device and device drivers install and work smoothly. If you experience any problems during the installation or use of your device, please contact Customer Support.

2.3 What Comes With Your Device

The following documentation and other materials are provided to assist you in learning about your haptic device:

The 3D Systems Haptic Device: The haptic device uses high-fidelity force feedback to make it possible to touch and manipulate virtual objects.

The Quick Start Guide: A quick start to attaching the haptic device, installing the drivers and using the device. For detailed information, see the 3D Systems Touch and Touch X User Guide.

The User Guide: This guide (available online at <https://softwaresupport.3dsystems.com>), describes the process of connecting the haptic device as well as how to work with the device including proper handling, troubleshooting, and device specifications. It also includes the process of installing the device drivers.

USB Type A to Type B Cable: This cable is used to connect the haptic device to the USB 2.0 or 3.0 port on the computer.

Universal Power Supply: The power supply can be used on any standard circuit, using the supplied power cord.

Power Cord: The power cord connects the Universal Power Supply to the wall outlet.

Wrist Rest (TouchX Only): The wrist rest comes with the TouchX device and provides wrist support when using the device.

2.4 System Requirements

The haptic device requires certain hardware and software components to be able to function properly. This section describes the minimum requirements for operating the haptic device.

Operating System	64-bit Windows 8.1, and 10
Processor	Intel i5 / i7, 5th Generation or greater CPU, Minimum 2.5 GHz frequency
RAM	4 GB
Graphics Card	Minimum 256 MB VRAM (Install the latest drivers)
Disk Space	512 MB
Display Resolution	1280 x 800 (Minimum)
Interface	USB 2.0 / 3.0 port or USB Hub that supports USB 2.0/ 3.0. (Use only USB A to B cable provided by 3D Systems).
OpenHaptics® SDK Compatibility	Yes

* Please visit the Support and Resources section of our website for more information: (<https://softwaresupport.3dsystems.com>).

2.5 Customer Support

WARNING: DO NOT OPEN THE DEVICE. Attempting to open or repair the device by anyone other than a certified authorized service center voids the manufacturer warranty and hardware maintenance contract. There are no serviceable components in the haptic device or power supply. Return to 3D Systems for servicing.

If you encounter any difficulties within your warranty period, you can obtain Technical Support through the three channels listed below. If you are out of warranty and do not have active maintenance, Technical Support is limited. If you purchased your 3D Systems haptic device from a distributor, please contact them first.

Visit the support section at <https://softwaresupport.3dsystems.com>

E-mail: Software.Support.Americas@3DSystems.com

Customer Support can also be reached via telephone: 1-978-494-8241

3 INSTALLING THE 3D SYSTEMS HAPTIC DEVICE

3.1 Overview

This chapter describes, step by step, how to install the haptic device and drivers:

- Install the Touch Device Driver software to allow your computer to communicate with the haptic device.
- Connect the haptic device to your power source and computer.

3.2 Important Information for Existing Users Upgrading to 3D Systems Touch™ or Touch X™

If you are an existing user with a haptic device and want to upgrade, before you run the Touch Setup (on the next page), you must follow these procedures prior to setup.

3.2.1-Uninstall the Previous Version of the Device Driver

Before installing the new Touch Device Driver, you MUST first uninstall any previous versions of the Phantom Device Driver (PDD) that you have installed on your system.

1. From the Control Panel, click Programs and Features.
2. Locate, select and uninstall the 3D Systems Touch Device Drivers.
3. Delete all files in the following location: C:\Users\Public\Documents\3DSystems\
4. Reboot the computer prior to performing the following steps.

3.3 Connecting the 3D Systems Touch Device

In this section you will setup the haptic device and plug in all of the cables. The following steps detail the recommended connection process (Connection Setup) below.

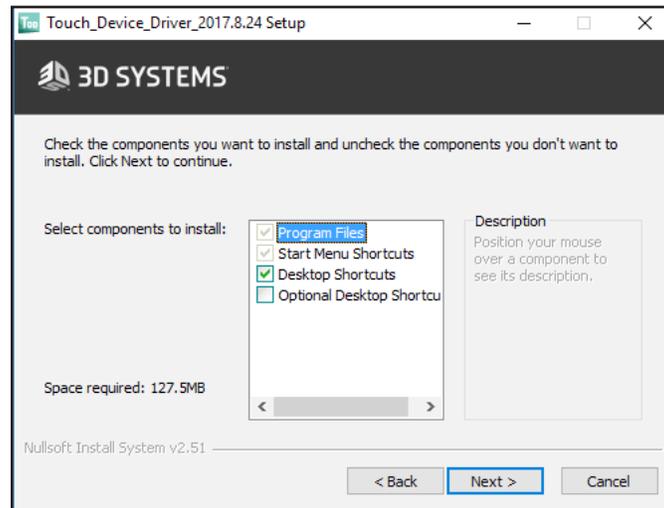
1. Remove the haptic device from the packaging. Position the haptic device in your workspace, using both hands to grasp the covers and base of the device. See [PROPER HANDLING AND POSITIONING OF THE HAPTIC DEVICE](#) section for instructions on how to handle the device to reduce the risk of damage.
2. Connect the supplied USB cable to both the device and the host computer.
3. Plug the power cord into an available outlet (for 110V the outlet must be rated for at least 2 Amps, for 220V: 1 Amp). Next, plug the power connector into the connector (Power) on the back of haptic device. Hook up the Power Supply (use only the supplied power supply with the haptic device). Plug the power cord into the power supply. The blue inkwell LED should quickly blink twice to indicate proper performance.

3.4 Installing the Touch Device Drivers

1. Download the Touch Device Driver from the 3D Systems website. Go to www.3Dsystems.com/haptics-devices/touch/documents, locate Touch Device Driver, and select Downloads.

NOTE: As with most other software packages, you must have administrator privileges on the machine in order to install system software.

2. If the installation wizard does not start, you will need to manually start the installation. Using Windows Explorer, locate and double-click the Touch Device Driver Installer .exe file.
3. Follow the Install Wizard to start the installation of the Touch Device Driver.



4. In the Select components to install, be sure the check box, “Desktop Shortcuts” is selected. This will create desktop shortcuts for the Touch Smart Setup Application. If you do not install the Desktop Shortcuts, you will need to go to Start>All Programs>3D Systems>Touch Smart Setup to run the Touch Smart Setup Application.

NOTE: Selecting the Optional Desktop Shortcuts checkbox will install the optional Touch Setup application, outlined in the [RUN 3D SYSTEMS TOUCH SMART SETUP](#) section.

5. Reboot your machine upon completion of this process. The device and drivers will not work properly until this has been completed.

3.5 Run the 3D Systems Touch Smart Setup

1. Double-click the Touch Smart Setup icon on your desktop. You will be presented with a dialog box for setting up your device. Make sure that the correct Touch model is chosen.

Note: If you have not installed Desktop Shortcuts, go to C:\Program Files\3D Systems\Touch Device Drivers and select the Touch_SmartSetup.exe.

4 APPENDIX A: NEW FEATURES AND ENHANCEMENTS

4.1 What's new with Touch Device Driver 2020.3.3

1. Major UI Changes and minor functionality changes to Touch Diagnostic. Double-click the 3D Systems Touch Setup icon on your desktop, or if you chose not to install desktop shortcuts click Start>All Programs>3D Systems>3D Systems Touch>3D Systems Touch Setup.
2. Minor art change to Touch Setup.

5 APPENDIX B: BUG FIXES

5.1 Bug fixes with Touch Device Driver 2020.3.3

1. Fixed bug that locked USB devices to exactly 1khz. (Even when OpenHaptics requested a different update rate.)
2. Improvement to Touch X force calculation algorithms
3. Adjustments to better match Touch X USB forces to TouchX-LAN forces.
4. Fixed a spelling error in the installer.
5. Updated User Guide Documentation.



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