

Elo Touch Solutions Multi-touch Driver Release Notes

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1. Known Issues

- For 2521 (PID 0x27) controllers with firmware versions older than 6.2, sometimes the touchscreen does not respond to touches in either the upper or lower 1-inch region of the monitor. In that case, the monitor needs to be power cycled, then re-calibrated to restore normal touch. If power cycling the monitor is not working, the utility EloCalMgr.exe (located in the target installation folder) can be used to reset the controller.
- In forced mouse mode, calibration on spanned display mode is not supported.
- On Windows 10 with multiple touch monitors, if a touch-controller does not have a unique serial number, the touch-to-display mapping may be lost after swapping its USB port. When this happens, please reboot or re-calibrate the monitor.
- On certain operating systems (Windows 8.1/10), during calibration, the calibration targets may be shown off position. In this case please check the "Windows Item Size" and make sure it is set at 100%.
- IR Beam Monitoring:
 - After the user dismisses the alert box, it will show up again if touch monitor's USB cable is re-plugged or the Property page of EloConfig is opened again.
 - This feature is not suitable to be used with EloTouchZones, the user may not be able to dismiss the alert prompt box if the box happens to be inside an area where touch is disabled.

2. Multi-touch package 6.x APIs vs. single-touch 5.x APIs

- Applications written with Elo's single-touch 5.x APIs will not work with multi-touch 6.x installation. These applications need to be updated (re-compile and link) in order to work with multi-touch package 6.x.

3. History of Changes

v3.0.1

- EloMtApi: pre-cal not committed to NVRam.
- USB driver: pivot test missing drawing segments
- EloConfig.exe: added command line parameter "/align" to allow video alignment.

v3.0.2

- Write NVRam is turned off by default (EloOptions.ini).

v4.0.1

- Support motherboard beep on Windows 7 (both 32-bit and 64-bit systems).
- Support optical touch screens: 0x202E-0x06 (dual-touch) and 0x04E7-0x80 (four-touches).
- Sending user defined Smartset commands (in EloOptions.ini) at system startup or driver loading.
- Utility to allow user to define touch enabled areas (EloTouchZones.exe).
- Position log files in "Elo Touch Systems" folder under "ProgramData".
- During calibration, once a monitor is touched, the session should be completed on that monitor.
- Incorrect Windows Monitor number showed in Property page if the system has unconnected video port.
- IT2701 sleep/resume fails about 20% of times.
- EloConfig unwanted popup at system startup.
- Support pCap touch screen 0xEEF-7200.

v4.0.2

- Serial driver: New calibration is not taking effect.
- Serial driver: After reboot, previous calibration is not applied.
- Serial driver: Pre-install either legacy serial driver or multi-touch serial driver (not both).

v4.0.3

- Correct the multi touch mode in Lumio/Optical monitor.
- Added Windows 8 support.
- Correct SmartSet timing issue.

v4.5.0

- Provide touch and video functions for IDS Suite.
- Provide option to limit number of touches to one touch set the value of "EnableOneTouch" under section "Setup Options" in EloOptions.ini. Users can use this feature to block multi-touch gestures.
- Support 6-touch Optical controller.
- Support new HID controller (PID 0x27).
- Bug fix: COACH-3 Calibration window not exiting at end of the calibration session.
- Provide sample program "EloDrawMultiMon.exe" utilizing new IOCTL and Elo API to demonstrate simultaneous drawing on multiple Elo touch screens.
- USB (0x26) better rejection for zero bezel frame touch.
- Send user defined Smartset commands in EloOptions.ini when USB driver loads.
- Updated Elo logo, icon and user license agreement.

v6.0.0

- Support Windows XP (32bit with SP3).

- New calibration approach (No longer need the HidCal utility. Original PreCal implementations removed).
- Auto mapping touch to display on Win7/8.
- Provide options for selecting different touch mode.
- Updated EloPrecal debugging/testing utility.
- Reduced package size.

v6.1.0

- Calibration with XY swapped/rotated.
- MS logo warning on XP during setup.
- Reboot after installation/uninstallation is no longer required.
- Calibration logging feature.
- 6-Touch IR support.
- Auto sizing bug fix (wrong increment cycle count).
- Enable controller's mouse mode on XP.
- Auto mapping of touch-to-display for Windows 8 and Windows 8.1.
- Alternative approach for calibration.

v6.2.0

- USB driver not loaded unless the cable is re-plugged or system is rebooted.
- Provide user options (EloOptions.ini) to use driver calibration instead of controller calibration.
- Correct the pCap firmware version shown in the property page.
- Support both new and old firmware for Optical touch monitors.
- Provide options to limit number of touches (please see Readme).
- IDS improvements: slow response, incorrect initial touch status, incorrect power status report.

v6.2.1

- Check the 2521 controller firmware version then apply onboard calibration if it's 6.2 or newer.
- Need to retrieve controller firmware version from the iProduct field for certain controllers.
- IDS: set/get monitor power status using Elo VCP codes.

v6.3.0

- Border touch warning for 2515-07 monitors.
- Calibration of multiple monitors in spanned display mode.
- Bug fix where for certain touch monitors (IntelliTouch 2500S / S-Cap 5020), the user is continuously being prompted to calibrate their touch monitor(s) after reboot.
- Bug fix for not mapping touch to display after calibration is performed in Windows 8.1.
- Bug fix for partially removing Elo files after user confirmed not to proceed with uninstallation.

v6.4.0

- Mouse mode support on all platforms.
- Edge acceleration value changes after calibration.
- Lost touch in ESD test.
- Touch sensitivity options for 2701, 2521 and 2515-07.
- Touch visual feedback for calibration testing.
- Hide mouse cursor (system wide).
- Option to enforce single-touch.
- EloDriverDefaults.exe (added 2 more parameters)
- Calibration issue on IDS monitors (resolution not reported correctly, touch targets off position).
- Support additional IntelliTouch Pro monitors.
- Adopt new product names IntelliTouch and IntelliTouch Pro.
- Elo API: Get touch point returns either raw or calibrated points.
- Missing EloService during silent installation.
- EloConfig UI shows garbage text in some systems.
- Calibration on spanned display with rotation.
- Avoid multi-instance of EloConfig.exe.
- UI Constraints in CommonSetting Dialog

v6.4.1

- User's choice for "Single Touch Mode" is not saved between reboots.
- Touch count was incorrectly limited to 4 in some Optical monitors.
- Set touch limit did not work correctly for certain pCap.
- Beep settings and HidCursor did not retain the states between sessions.
- Support more pCaps.
- Improve double-click performance.
- Right-click and hold to bring up context menu.

v6.4.2

- Fix the occasional setup failure especially with some fresh.
- Certain IR monitors lost touch after 3-point calibration.

v6.4.3

- Support 10-touch pCap (PID 0x212C).
- Support 10-touch IR (PID 0x13).
- Bug fix for EloDriverDefaults.exe.

v6.4.4 beta

- Fix "EnableOneTouch" using EloSetup and EloOptions.ini.
- During setup, it takes too long before the license dialog box shows up.
- EloDriverDefaults has not been fully tested for this beta release.

v6.5.0 (04-13-2015 v6.5.0.23)

- Configure Beep, Touch mode and Enforce single touch as per-device settings.
- Double-click settings (speed and size).
- Right-click button (in mouse mode only).
- Per-monitor touch property settings using EloOptions.ini and EloDriverDefaults.
- Support pCap PID 0x67.
- Setup supports more user defined settings under [Setup Options] in EloOptions.ini.

v6.5.0 b35 (04-29-2015)

- Incorrect prompt for re-calibration with IR monitors.
- Fix calibration issue when IRAutoCalibration is enabled on system with IR and pCap.
- Connected serial touch devices not installed during silent installation.
- Installation on POSReady 2009 prompting for mouse drivers.

v6.6.0 RC7 (10-20-2015, custom release)

- Custom touch-to-display mapping for pCap and IR (after install).
- Right-click button sometimes stuck with the "On" state.
- Spanned mode setup dialog box shows up unexpected.
- Prompt for calibration when invoking the Right-click button when the monitor is calibrated.
- IR calibration data in EloOptions.ini not get applied during calibration.
- Motherboard beep on Win8.1.
- Settings defined under [Setup Options] in EloOptions.ini will apply to new devices.
- EloTouchZones shows blank dialog box with certain system locales.
- EloWritePRM bug fix.

v6.7.0 (10-02-2015)

- Supporting more pCaps.
- API bug fix: EnableTouch, Get/Set Max Touch.
- EloTouchZones show blank UI for certain system locales.

v6.8.0 (02-29-2016)

- Support new IntelliTouch controller (PID 0x28).
- Replaced PID 0x214E with 0x8A6E.
- Verify NVRam Cal data writing during calibration.
- Use 0x4E7/0x2410 to replace PIDs 0x9570 and 0x991C.
- Rotation for one-touch pCap.
- No longer prompt for calibration at end of Setup.
- AccuTouch issues: prompt calibration on reboot, failed to calibrate, FW version missing in 32 bit OS.
- Unexpected prompt for calibration on reboot when a calibrated monitor is connected to a new system.
- Sometimes during calibration, overlapped dialog boxes were observed.
- Fix calibration failure on 2500U.

- On some systems, right-click context manual pops up when resumed from S3/S4 modes.
- Added ini option **AutoInvokeCalibration** to enable/disable auto invoking calibration.

v6.8.1 (02-23-2016, custom release)

- Issues when install as mouse device but previous uninstall did not restore inbox HID mouse state.

v6.8.2 (05-06-2016)

- EloConfig property page: sometimes two mouse mode checkboxes can be selected.
- Support onboard calibration for pid 0x28's emulation mode 2521.
- Indicate pid 0x28 emulation mode in property page with "(e)".
- During calibration cursor should not show up.
- Fix for UTLIRDiag where beep setting back to default at start of the utility.
- Rotate and calibration issue if installed as mouse device for pid x28 or its 2521 emulation.
- No longer use Smartset commands for retrieving controller serial numbers.
- Automatic touch to display mapping for pCap 0x8A6E.
- During calibration, the "Retry" does not work if mouse click mode is Click-on-Touch.

v6.8.3 build9 (07-12-2016)

- When serial monitors are installed as mouse device, touch mapped to wrong monitor after calibration.
- Right-click context menu does not pop up reliably on certain pCap monitors.
- Touch still get registered if quick draw through Elo Touch Zone where touch is disabled.
- Lock certain EloConfig UI options by using EloOptions.ini entry "LockedConfiguration".
- Retrieve certain controller's serial numbers from their customized configuration blocks (PID 0x212C and 0x8A6E).
- When Cursor Edge Acceleration is enabled, mouse pointer position is off from dragging finger.

v6.8.3 build10 (07-14-2016)

- Re-built and re-WHQLed.

v6.8.4 (07-21-2016)

- No reboot needed for serial driver installation.
- Reading controller (PID 0x212C and 0x8A6E) SNs.
- Reduce calibration startup time (EloConfig /align).

v6.8.5 (07-25-2016)

- Fix Elo API for setting beep options.

v6.9.0 (09-14-2016)

- IR failed beam monitoring.
- EloDriverDefaults fix for ini's monitor sections.

v6.9.1 (10-12-2016)

- Support 20-touch IR monitors (PID: 0x13, size: 55/70 in).

v6.9.2 (11-10-2016)

- Write controller calibration only during manual calibration.
- Restore controller calibration parameters after user has canceled a calibration session.
- Added Monitor S/N as one of the device parameters.
- Chinese Traditional text is not displayed correctly on Win10 LTSB.
- Allow user to use MS API GetMessageExtraInfo to distinguish between finger touch and physical mouse click. EloOptions.ini has detailed instructions.

v6.9.3 (12-19-2016)

- Legacy touch monitors in span mode: touch and hold causes shoot-ups.
- Chinese text too small on some Win10 LTSB systems.
- Display waiting message before display 1st calibration target.
- Sometimes need to touch the 1st target multiple times during calibration.
- EloConfig flashes at system start.
- Command line calibration: allow user to calibrate a touch screen to specified monitor.
- EloConfig-AboutBox-Identify Monitors: display Elo Monitor Numbers on all monitors connected to the system.
- EloConfig - Property page: Checkbox for "Restore Calibration Default" replaced with a Button with additional action: turn controller mode settings to default (onboard calibration is off).
- Span mode settings not persistent between reboots.

v6.9.4 (12-28-2016)

- Uninstallation: remove serial installation only if serial driver has been installed.
- Uninstallation: no longer copies EloDelMe.bat to [C:\](#) root.

v6.9.5 (01-11-2017)

- EloTouchZones: Right-click on touch-disabled area still brings up the context manual.
- EloConfig /align: Add more options to align monitor to primary or the non-primary. Please see User manual section 3.2.1 for details.
- PulseTouch preference parameters defined in EloOptions.ini is not applied after installation.

v6.9.6 (03-02-2017)

- Supporting 12-touch pCap (PID 0x240C).

v6.9.7 (05-18-2017)

- Lost touch on Windows 10 Creator (v1703).
- Restore the “Border Warning” for 2515.
- Sync up distributed SDK header files.
- EloConfig - Property: Enable IR Monitor Beep for Elo legacy IR monitors only.

v6.9.8 (08-28-2017)

- Missing prompt at end of uninstallation of serial drivers.
- IR Beam Block Monitoring improvements.
- XP System with 2 PulseTouch monitors freezes at shutdown.

v6.9.8.4 (08-30-2017)

- EloDriverDefaults crashes.

v6.9.9 (09-24-2017)

- Custom build (detect stuck point and power-cycle the device).
- Correct HID Report feature ID for certain pCaps.
- Add new device param to turn off device power settings.

v6.9.10 (09-27-2017)

- Correct HID Report feature ID for certain pCaps.
- Correct the Elo support link in AboutBox.
- Show PID on EloConfig’s Property Page.

v6.9.11 (Dec. 05 2017)

- Some touch monitors failed to switch to digitizer mode after wakeup.

v6.9.12 (12-18-2017)

- Mapping multiple APR Cal file from network storage.
- Mapping certain pCap touch monitors with monitor serial number stored in NVRAM.
- No touch after uninstallation.
- Fix Elo API EloSetCalData issue with EloWriteCtrlCalData utility.
- Added version lock for using Elo SDK.

v6.9.14 (02-02-2018)

- Support more pCaps (0x080B and 0x080C)
- Security vulnerability issue in EloService execution path.
- Fixed hanging issue for APR flash download progress dialog box.

v6.9.15 (02-26-2018)

- Fix right-click button tool in mouse mode.
- Calibration session invoked by pressing Enter key after reboot.
- EloConfig: set focus to the Close button at system start up and each time invoked from desktop.

v6.9.16 (03-16-2018)

- Add option to generate kernel level logging in Windows Event Log.

v6.9.17 (06-18-2018)

- EloConfig: show controller model information in the Property page.
- Add PID 0x28 into touch sensitivity supporting list.
- Stricter checking for previous installed Elo package during new installation.
- Kernel mode multi-touch information logging.

v6.9.18 (08-03-2018)

- USB driver fix for gaps showing when flicking in corner area.
- USB driver fix (workaround) for drawing line shoot ups.
- Updated Elo logo.

v6.9.19 (10-17-2018)

- Hidden Taskbar not shown after rotating the monitor 90 degrees and followed by a calibration on Windows 7.
- Elo Serial installation folder remains after uninstallation.
- EloX crashes
- USB Controller reset.

v6.9.20 (02-11-2019)

- Add driver support for the new pCap monitor (PID 0x2902)
- Fix EloConfig startup error in Windows XP.

v6.9.21 (3-21-2019)

- Internal only, not released.

v6.9.22 (5-16-2019)

- EloConfig: new option in EloOptions.in to map touch to Elo monitor.
- USB driver: driver support for new pCap monitor (7in PID 0x1080).
- EloSetup: Smartset commands in EloOptions.ini not executed with serial interface.
- EloCalMgr: v2.5.2, new command line option /setdef to set controller defaults.
- Use driver calibration for AT Serial interface.
- Calibration failure on ForceMouse mode with video rotation.
- Show configuration file version (if available) on pCap PID 0090 in Properties page

v6.9.23 (08-23-2019)

- EloConfig: fixed handle leaks.
- Support pCap PID 0x801 (65in, 40Touch).
- Support pCap PID 0x2903 (15.6in)

v6.9.24 (12-09-2019)

- EloOptions.ini:
Options to map touch to primary or non-primary
Support pCap PID 0x820 (10Touch).
- Note: this driver package does not support the pre-install or silent install on Windows XP. During the standard installation, the user needs to manually click away the Microsoft driver security warnings to proceed.