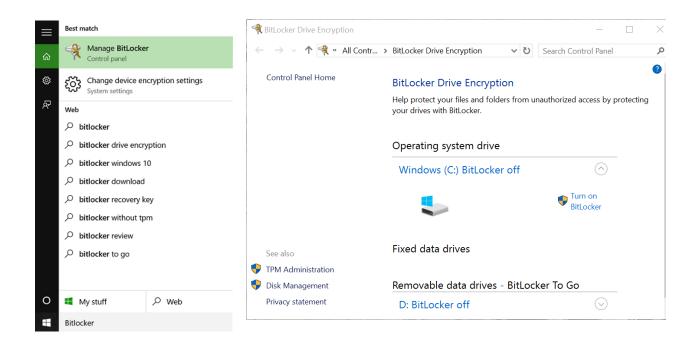
Windows 10 USB Driver Signing and certification requirements for device drivers being installed on the computer require selecting a mode that will bypass the signing requirement. The USB driver used by the PCA-100, JSD-60, and JSD-100 are native to the operating system and use a co-installer. With Windows 10, the co-installer will not function unless the driver signature enforcement is disabled. Once the driver is installed, it will continue to function correctly without a need to change the startup options on subsequent system reboot. The following describes how to enter the Windows 10 startup options menu and to use Device Manager to configure the computer to run with the respective PCA-100, JSD-60, or JSD-100 USB Driver.

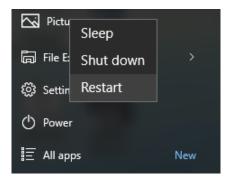
Windows 10 Pro has a drive encryption feature called "Bitlocker" that encrypts your data stored on the hard drive. This feature is enabled by default on Microsoft's Surface Pro 3 tablet, it maybe enabled from third parties that preconfigured your computer's installation. The follow describes how to check your "Bitlocker" status and to disable it in order to restart your computer with the driver signature enforcement disabled.

1. In the Windows Search bar enter "bitlocker" to access Bitlocker Drive Encryption control panel settings dialog. As shown below in the screen capture on the left, "Manage BitLocker" menu item. In the settings turn off Windows BitLocker and then proceed with booting the computer to the advance startup settings option.



When BitLocker is disabled the startup options are available and are described in the following steps. After driver installation and application verification, the BitLocker feature can be enabled.

1. Access power options by activating the Windows 10 Start Menu as shown in the screen capture below. Select the Power menu item and a pop up will appear with the Sleep, Shutdown, and Restart options. With the power options menu displayed, hold the shift key while activating the Restart. Windows 10 will now shut down and restart.

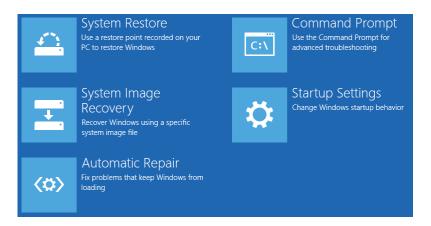


2. Windows 10 will then display "Choose an Option" screen as shown in the following, note that Windows 8 and 10 display the same screens. Select the trouble shoot option and then the next screen will show the troubleshoot menu.

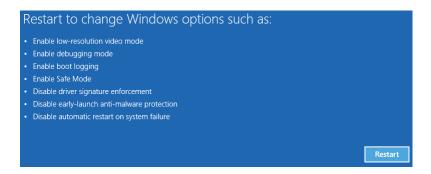




3. In the troubleshoot menu select the advanced options and the following screen will appear. Select the startup settings option.



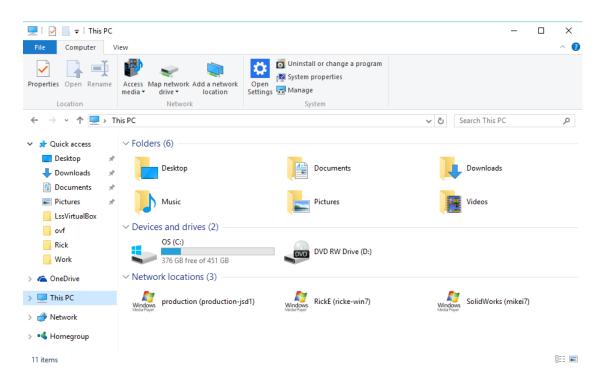
4. Windows will then show a restart prompt and after activating the restart button the systems will then restart with the startup options menu.



5. Next the startup options menu is displayed and from it the option to disable driver signature enforcement is available. When the option is selected by pressing the F7 key, the operating system restarts. At this time the system will boot with the driver signature enforcement disabled. This will then allow the user to make modification to the installed or to be installed drivers that are not signed.



6. There are two methods for installing USB drivers, one is by a Driver Package Installer (DPInst) and the other is by Device Manager's Update Driver Software method. As a note the driver package installers are available in the product's "WinUSB\_Drivers" folder and by running the DPInst64.exe or DPInst32.exe, the respective driver version will be installed. As an alternative to the driver package installer, Device Manager can be used. Device Manager can be launched by either a right mouse click on the Windows Start Menu or by using File Explorer. Located on the bottom task bar a quick launch icon for Windows File Explorer is available. To access the Device Manager utility launch File Explorer will be a task bar item when the left plane selects "This PC." In the ribbon note the System group items when the Computer tab is selected. The device manager can be accessed and will display a Windows 7 style management tool with the same behavior. This will show a tree containing the current device driver activity with their status icon.



- 7. For each product application there's a respective USB driver and is typically stored in a subfolder. There are two methods for updating or loading the desired driver. One can use the driver update method by selecting the device in the manager's tree view and selecting with the mouse pointer and then with a right mouse click.
- 8. When using Device Manager's update option, right mouse click on the device and in the popup menu select the "Update Driver Software..." option. In the next window select the "Browse my computer for the driver software." Use the browse button to select the desired driver folder and then check "include subfolder" option followed by next button activation.

An installer warning will be displayed and select the "Install this driver software anyway." The following is a list of applications with their USB driver folder:

- C:\Program Files\USL\PCA-100\WinUSB\_Drivers
- C:\Program Files (x86)\USL\JSD-60\WinUSB\_Drivers
- C:\Program Files (x86)\USL\JSD-100\WinUSB\_Drivers

- 9. As an alternative to using Device Manager a driver installation utility called "DPInst64.exe" (Driver Package Installer) can be used. This utility is available in the respective product's WinUSB\_Drivers folder.
- 10. As shown in the screen capture below, DPInst64.exe is launched. Then by proceeding with the installation, a Windows Security prompt is displayed. By activating the "Install this driver software anyway" it will proceed driver installation process. When it completes the installation a status of the process is displayed.

