

Application Note

PL277x SuperSpeed USB 3.0 SATA Bridge Controllers

Autorun CD-ROM and LockToGo Security Application Guide

Introduction

This application note guides you on how to configure the PL277x USB Hard Drive devices with a Virtual Autorun CD-ROM partition and how to load and operate the Prolific LockToGo password security software. The LockToGo program allows you to set a password to lock the hard drive of the PL277x device and can support locking multiple partitions (one device) at the same time.

System Requirements

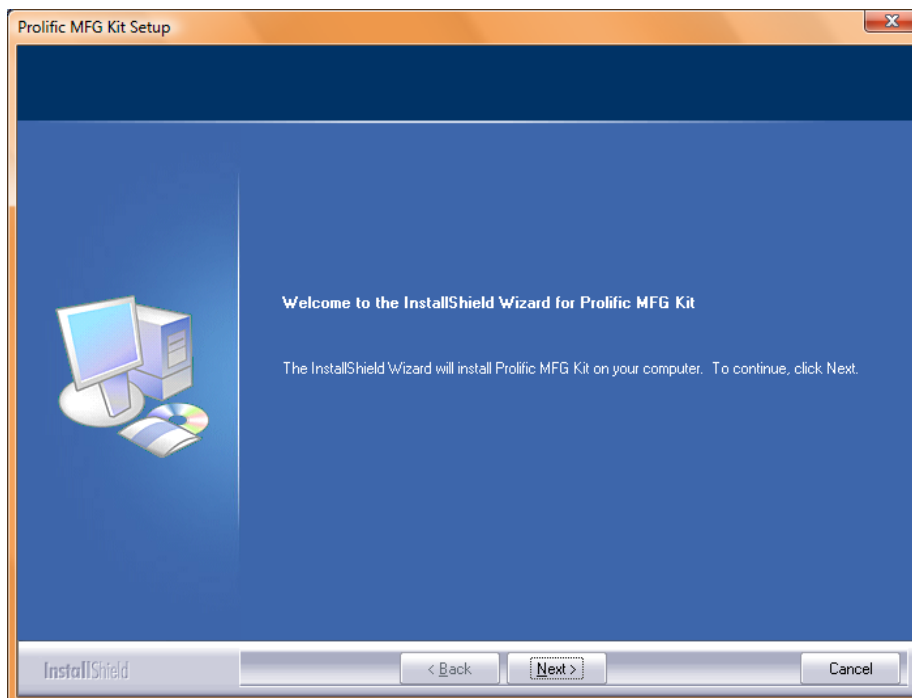
This application requires the following:

- Operation System: Windows 2000/XP/Vista/7
- PL277x Hard Drive Enclosures with SPI Serial Flash for updating to Autorun Firmware
- Prolific MultiPort MFG Tool Program v1007 or above (with ISO File programming)
- PL277x Autorun Firmware
- Prolific LockToGo ISO program file

Please check with Prolific for the latest versions of above programs and firmware.

Installing Prolific MultiPort MFG Tool Program

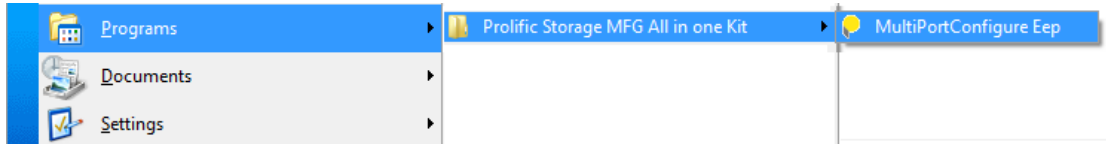
In order for you to update and configure the PL277x device, you would first need to install the Prolific MultiPort MFG Tool Program. Double-click on the Prolific MFG Kit Setup program to install.



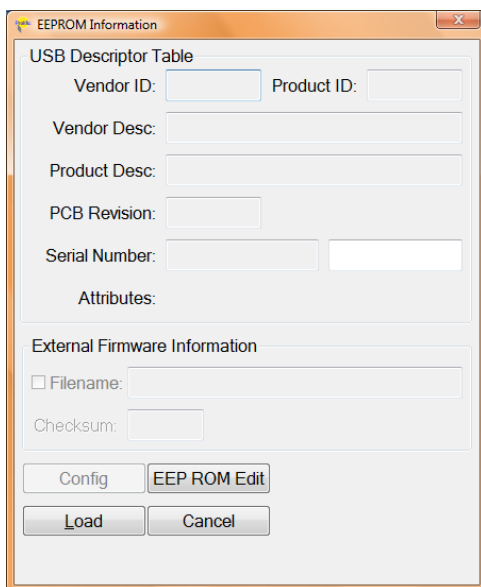
Programming the AutoRun Firmware and LockToGo Program

Following are the steps to configure the PL277x Hard Drive with AutoRun firmware and LockToGo:

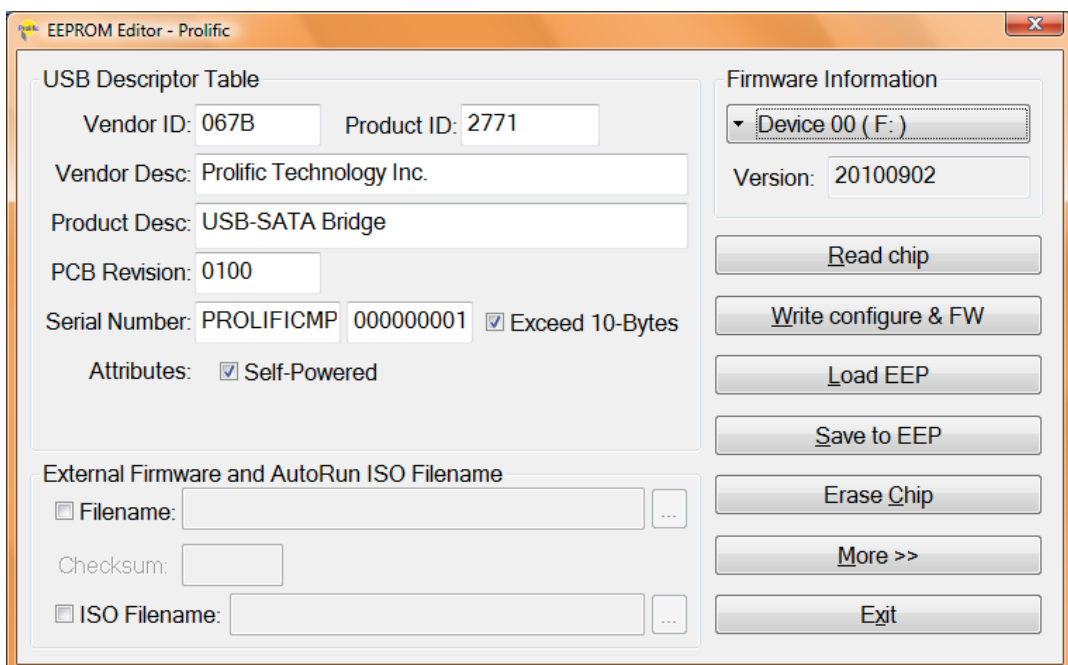
1. First plug-in the PL277x Hard Drive device and make sure the device is detected properly. Run the Prolific MultiPortMFG program (MultiPortMFG.exe) from the Programs Folder.



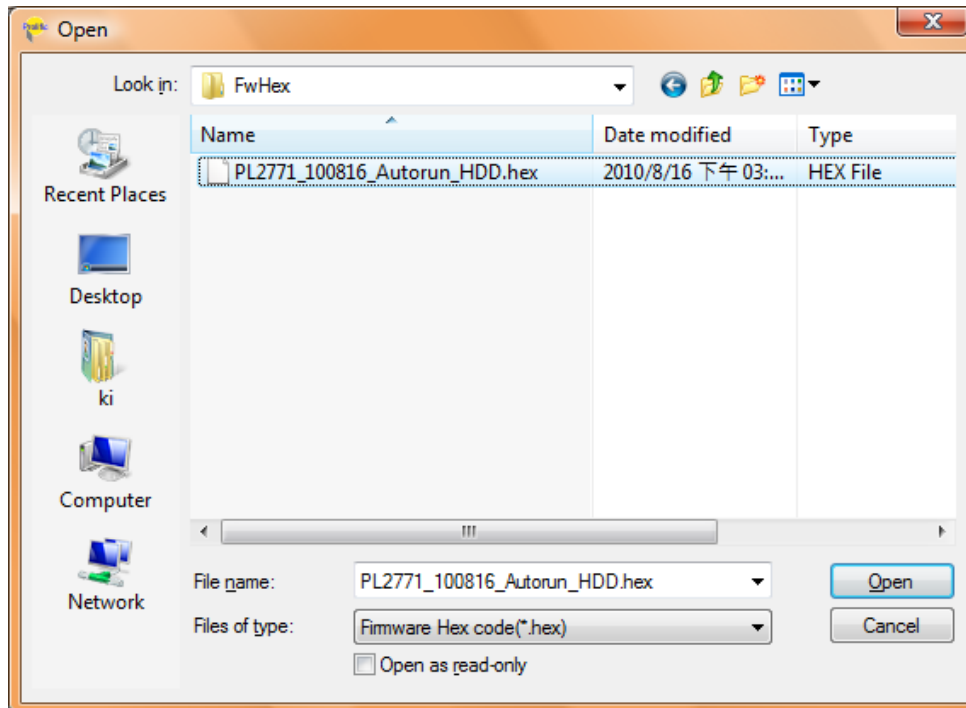
2. Press the Alt-E keys on the EEPROM Information window to open the EEPROM Editor which you will use to load and write the Autorun firmware and ISO file.



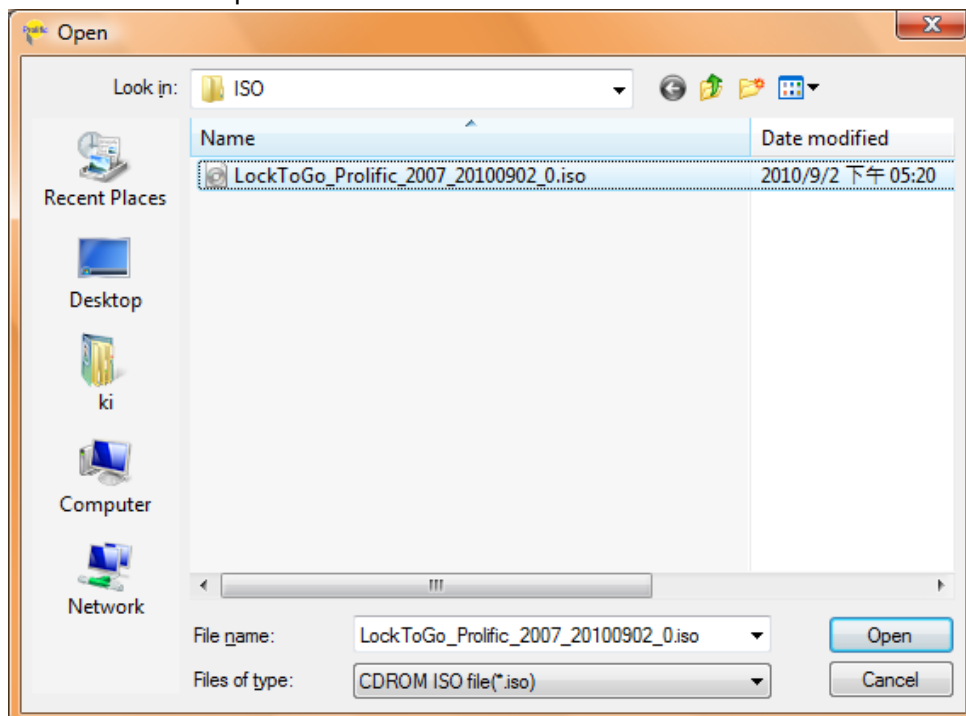
→ Press Alt-E keys to open EEPROM Editor.



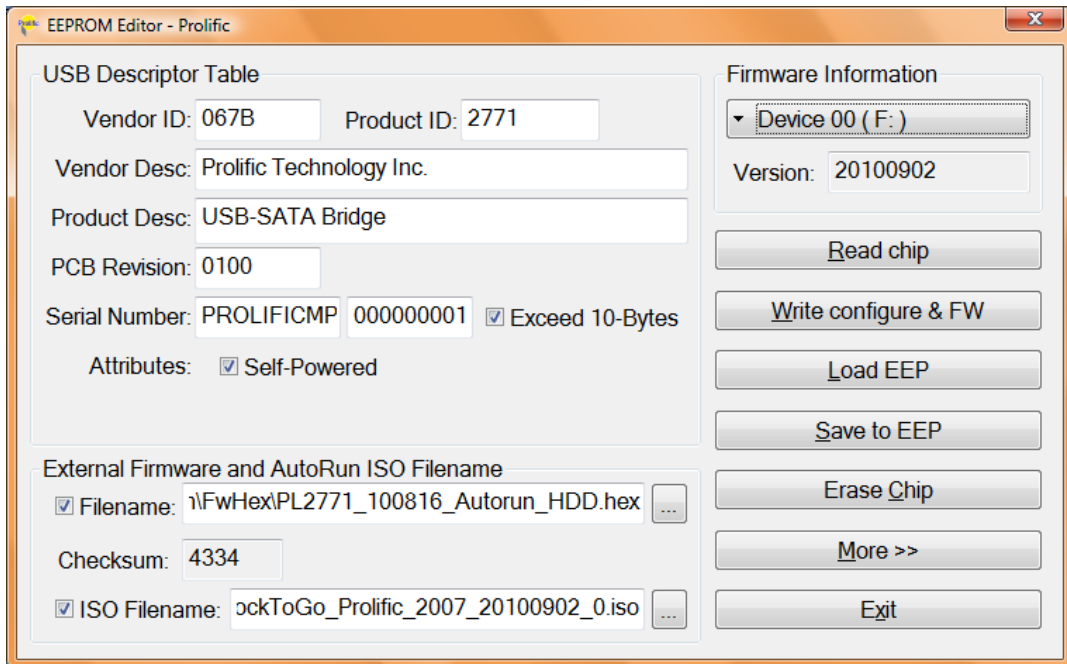
3. On the External Firmware Information area of the EEPROM Editor, click on the Filename checkbox to load the AutoRun firmware. Browse to where the PL277x AutoRun firmware hex file is located and click Open.



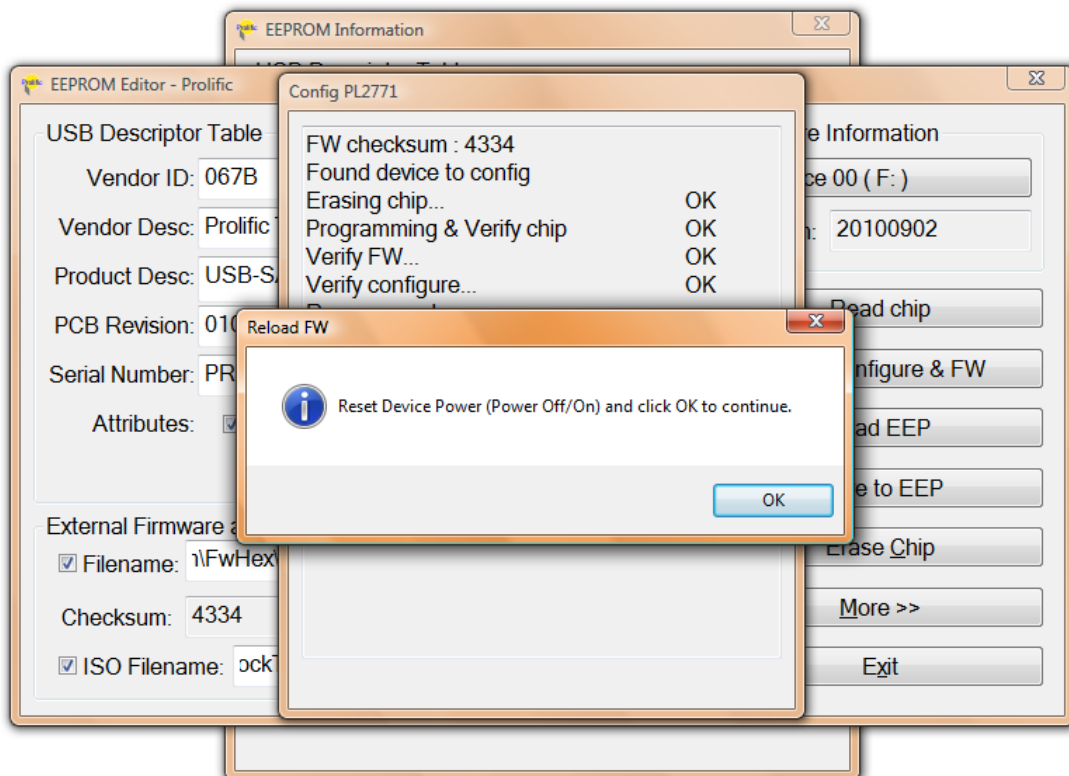
4. Then click on the ISO Filename checkbox to load the Autorun ISO file. For this application note, the Prolific LockToGo ISO program is used for demonstration. Click on the LockToGo ISO file and click Open to load the file.



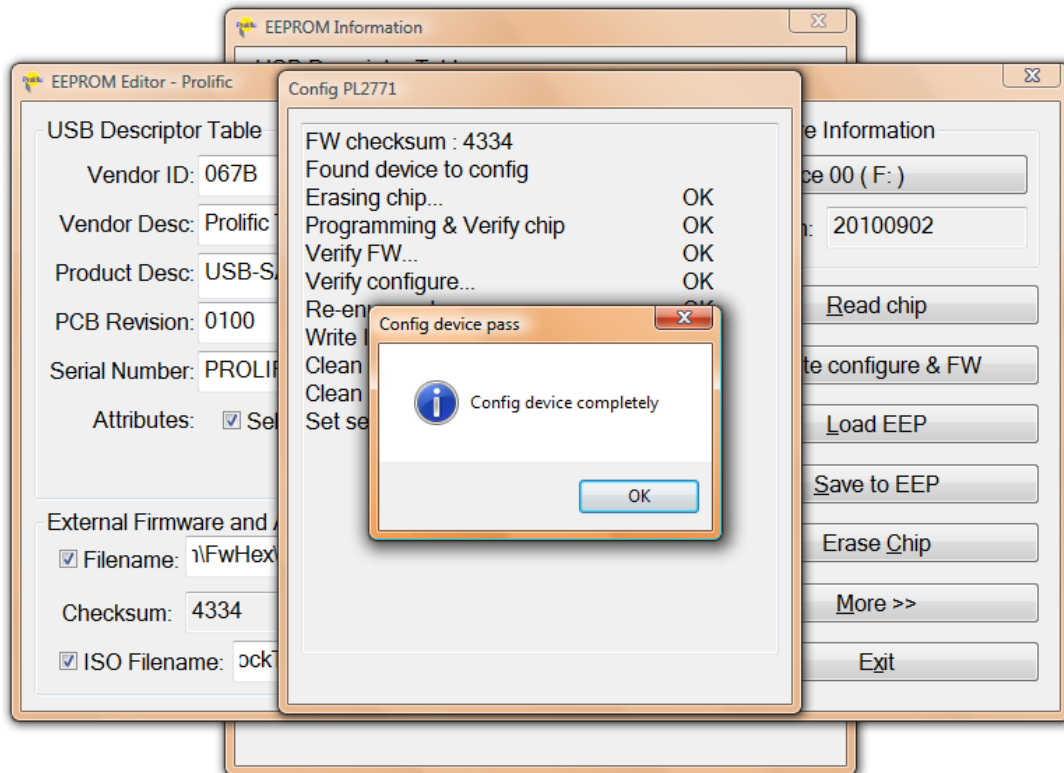
- After you have loaded the AutoRun firmware and ISO file, click the “Write configure & FW” button to begin the configuration.



- EEPROM Editor will then start to update the firmware and verify it. Afterwards, it will prompt you to reset the power of the device first to activate the new AutoRun firmware. After you have reset the device power and the device has been detected, click OK to continue.



- EEPROM Editor will then re-enumerate the device and will start to write the ISO file inside the Autorun partition of the hard drive device. When finished, it will pop out a message that device configuration is complete. You will need to replug the device again.



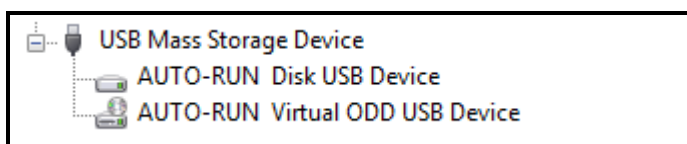
Running the LockToGo Program

This section illustrates how to use the Prolific LockToGo program of the PL277x hard drive device.

- When you plug-in the PL277x hard drive device for the first time with AutoRun firmware and LockToGo program, notice that two drives will always be detected in My Computer window: a Virtual ODD LockToGo drive and a Removable Disk drive.



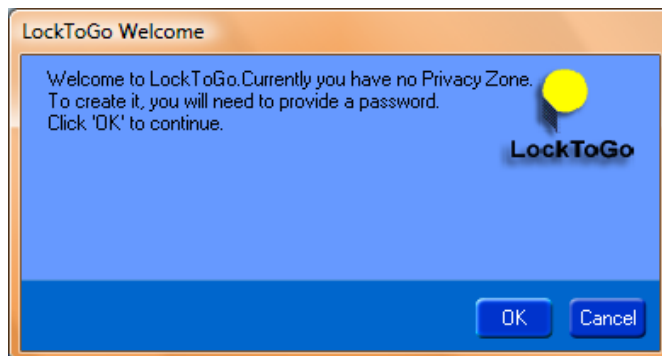
You can also go to Control Panel-Systems-Device Manager (View by Connections) to see the detected devices.



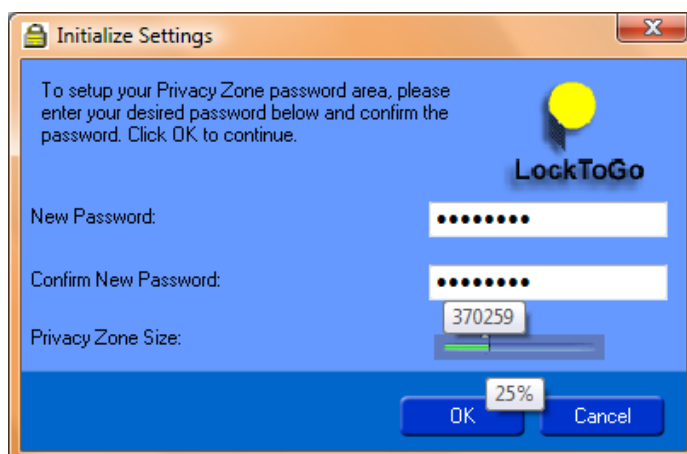
- The LockToGo program stored inside the Virtual ODD drive of the PL277x device will then immediately autorun. Make sure that your computer did not disabled the autorun function for Optical drives. Click to run the program.



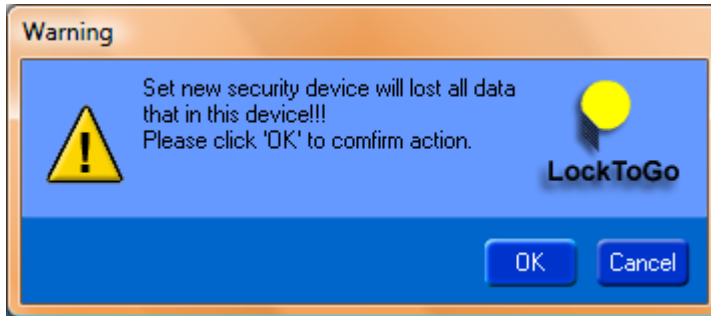
- The LockToGo program will then popup to inform you for the first time that there is currently no Privacy Zone or password setup yet on the drive. Click OK to continue.



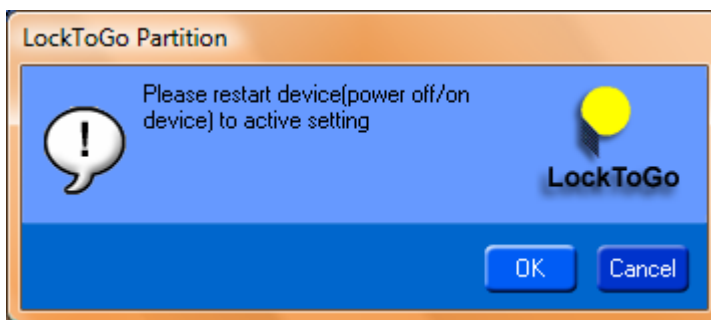
- You will then need to enter a new password and confirm the same password. You can also immediately set the Privacy Zone size for the password-protected private partition by moving the slide bar. Click OK to set the new password and private zone partition.



5. The program will warn you that doing this will erase all data on the disk. Click OK to continue.



6. LockToGo program will then prompt you when complete. You will need to restart the device power to activate the new password and partition settings. Click OK to continue.



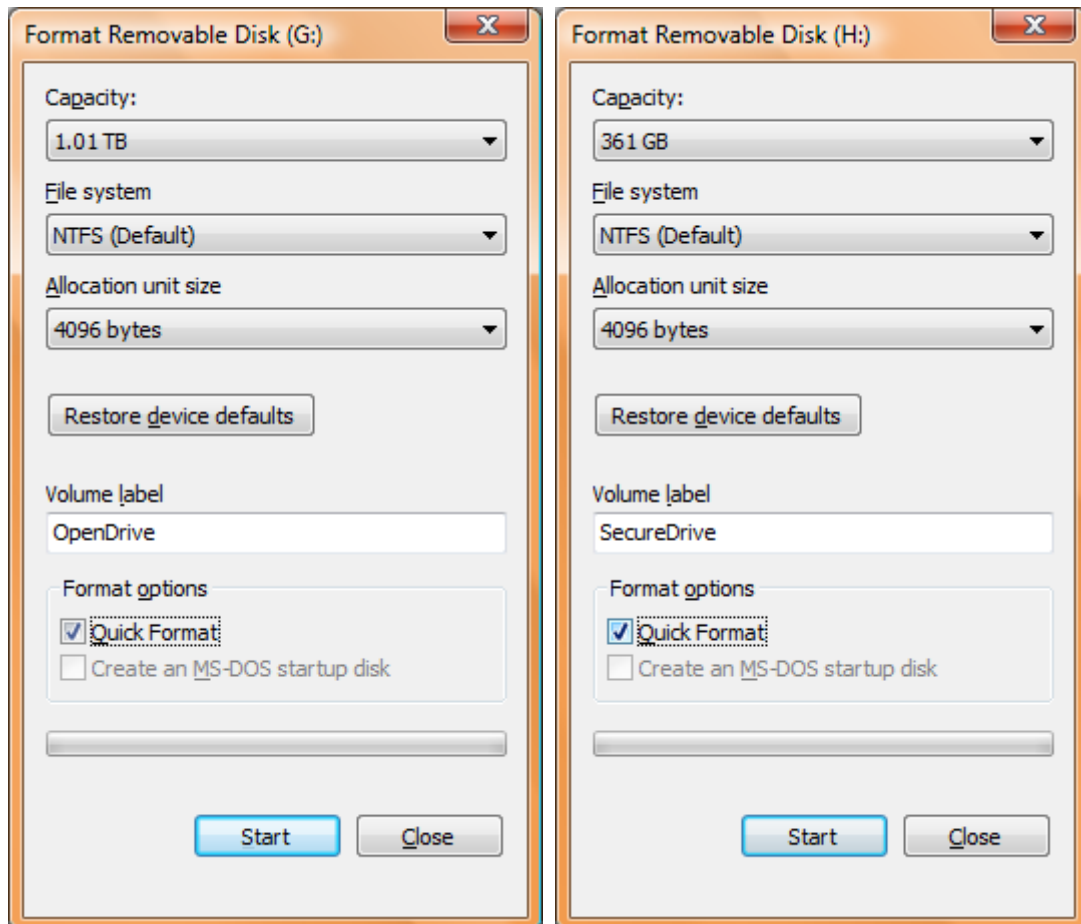
7. Notice that after you have powered the device back, the LockToGo program will popup to inform you that the disk has been locked and you need to enter the password. Enter the correct password to unlock the secured partition.



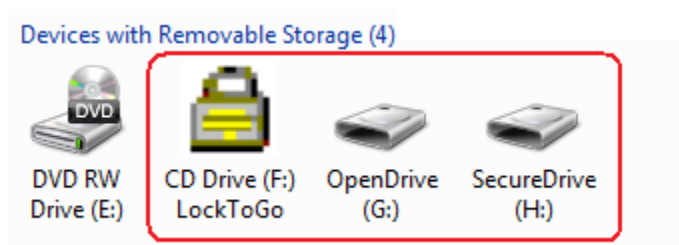
8. After you entered the correct password, notice in My Computer that you will now see three drives: one is the LockToGo virtual ODD; one is the open or non-secured partition drive; and the other is the secured partition which is password protected.



- Before you can use the two partition drives, you would need to format them first. Right-click on the drive and click Format. You can enter the Volume label for each partition to help you distinguish which partition drive is the non-secured open drive or the secured partition drive. Click OK to continue.



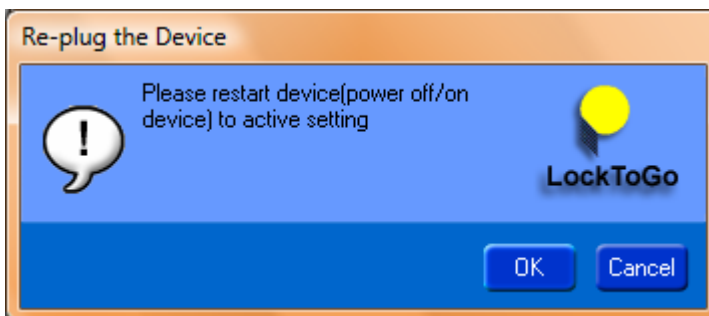
- After you have formatted the two partition drives and entered the volume labels, you will see in My Computer that the drives are already formatted and ready to use.



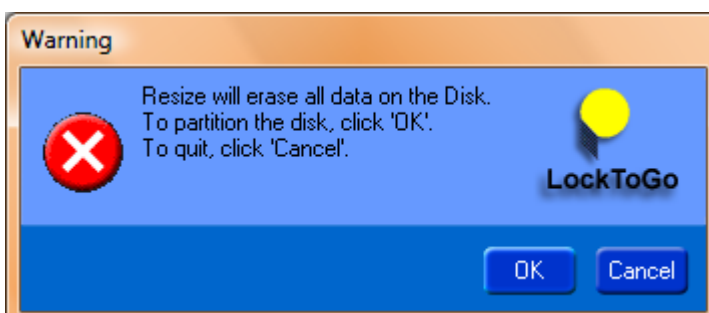
- To change the password, you need to enter the password first after you plugin the PL277x device to open both partition drives. Then, double-click the LockToGo autorun drive again to open the LockToGo program. The LockTogo program window will show options to either change the password or resize the partition. Enter the old password and the new password twice. Click Change password button to continue.



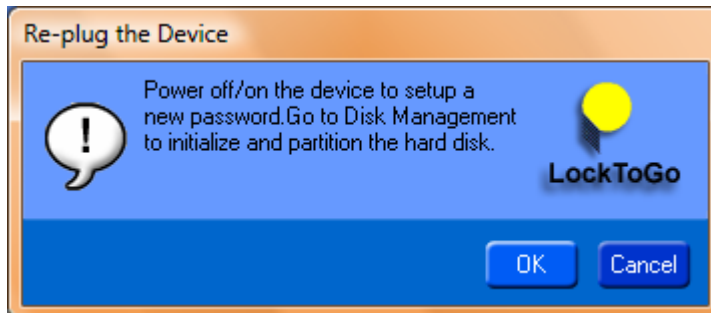
12. After the new password is set, the LockToGo program will then prompt you that the new password was successfully set. Click OK to close the program and reset the device power to activate new password. Next time to plug the device, you will need to enter the new password.



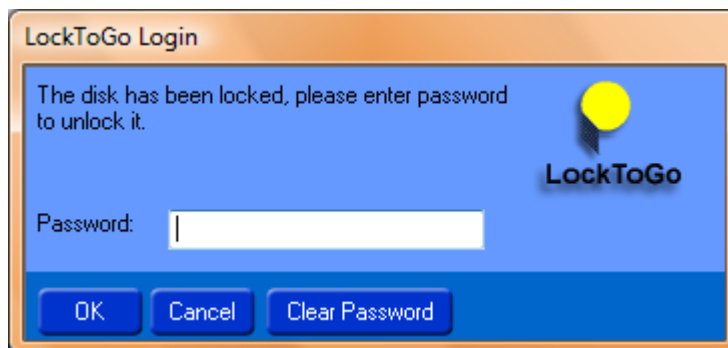
13. If you choose to resize the security partition (PrivacyZone), go back to Step 11 and move the slide bar to resize the partition and click "Resize security" button. LockToGo will warn you first that this will erase all data on the disk drive. Click OK to continue. Note that this will not erase the password.



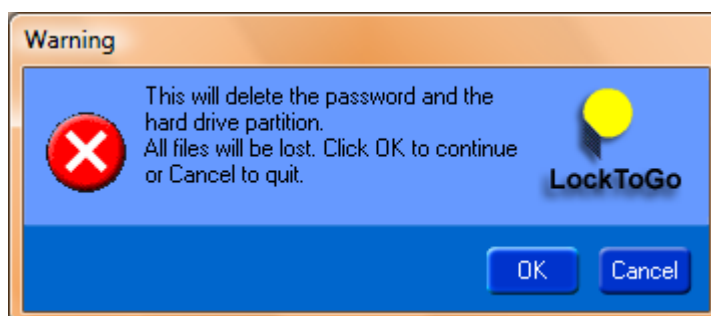
14. After resize partition is done, LockToGo will prompt you to reset the device power again to activate new partition settings. You would also need to enter the password to unlock the security partition and then you need to reformat both drives.



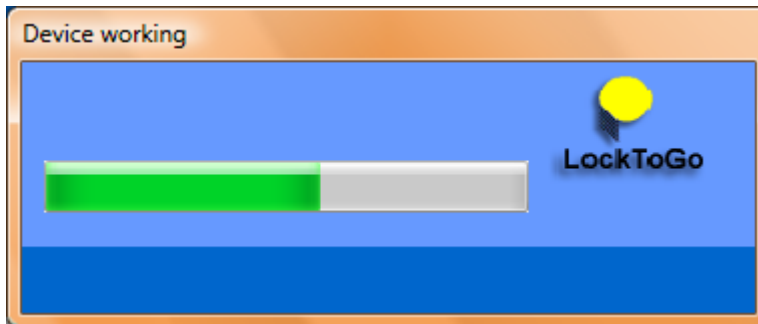
15. To clear the password, unplug and plug the PL277x device. When LockToGo prompts you to enter the password, you will see the Clear Password button on the right side of the window. You would need to clear the password if you forgot your password or if you want to delete the partition drives.



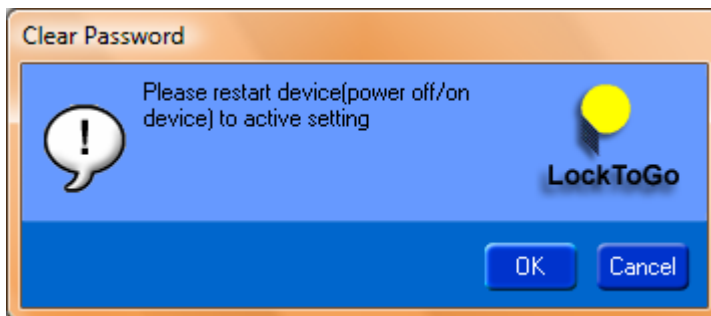
16. After you click the Clear Password button, a warning message will prompt you that both the password and the hard drive partition will be erased. This is done to keep the data inside the hard drive partition from being copied or stolen. If you are the owner of the PL77x hard drive, it is best that you first backup all files inside the hard drive before you clear the password. It is also very important that you remember your password. Otherwise, you won't be able to access your data inside the drive once you forgot the password. Click OK to continue.



17. Clearing the password might take a few minutes to complete.



18. LockToGo then will then inform you that password and the hard drive partition have been cleared successfully. Click OK to close the program. After resetting the device power, the LockToGo program will prompt you to setup a new password and Privacy Zone area again. Refer back to the beginning steps to perform these procedures.



How to Uninstall the LockToGo Program (Virtual CDROM)

To uninstall the LockToGo program and remove the virtual CDROM drive, you would need to run Prolific MFG Kit to erase or update the firmware. You might want to run clear the password and partition first before erasing the external firmware. Contact Prolific FAE for support.