

dw221 speedy and PL-Series Drive Combined Firmware Update via savvy



CAUTION

If this operation fails for any reason (e.g. power failure, network failure, etc.), the device will be rendered inoperable and must be returned to the factory for recovery! It is recommended to have a direct connection from the computer to the device in order to minimize the chance of a network failure. You may use Ethernet or USB to directly connect your computer to the device.

This document instructs you on how to update the firmware of two different devices. The dw221 speedy is the programmable device used as an interface to your PL-Series DC drive, using the drive.web distributed control technology. If your speedy's firmware is 0x2022 or earlier, you must update the firmware in your dw221 before updating your PL-Series drive.

Before You Begin

1. Before proceeding with these updates, you must establish that they are required. To determine if this is necessary, you may check using the MMI display of your PL-Series drive. Navigate from the top menu to **DISPLAY FUNCTIONS**→**SOFTWARE VERSION**. From the Diagnostic screens, follow the list of push button commands (Right, 4xDown, Right, 3xDown, Right).

If the Software Version Issue reports 6.10 or earlier, you MUST update the drive.



Get Prepared

2. The latest version of Java Runtime Environment must be installed to run savvy. Here is a link to download Java for free if you need it: <http://www.java.com/>
3. Download the latest version savvy at <http://driveweb.com/tech/update.php>. Click **Download the FREE version of drive.web savvy** to download it.
4. You can download the latest firmware <http://driveweb.com/tech/update.php>. At the bottom of the page under **firmware**, download the file named **dw22x-2xxx_and_pl-v6-xx_combined.zip**. This file contains the latest version of firmware for the dw221 and the drive. BE SURE TO UNZIP THESE FILES BEFORE YOU BEGIN. Move the .dw-firmware files to a directory where you can easily find them.



WARNING!

This software enables the user to have extensive access to potentially dangerous machinery. This software must only be used by qualified personnel who are completely familiar with the machinery and the software. This software can cause the machinery to start and stop unexpectedly or to operate in a dangerous manner that could cause serious injury or death. Extreme caution is essential – the user hereby accepts responsibility for the use of this product.



WARNING!

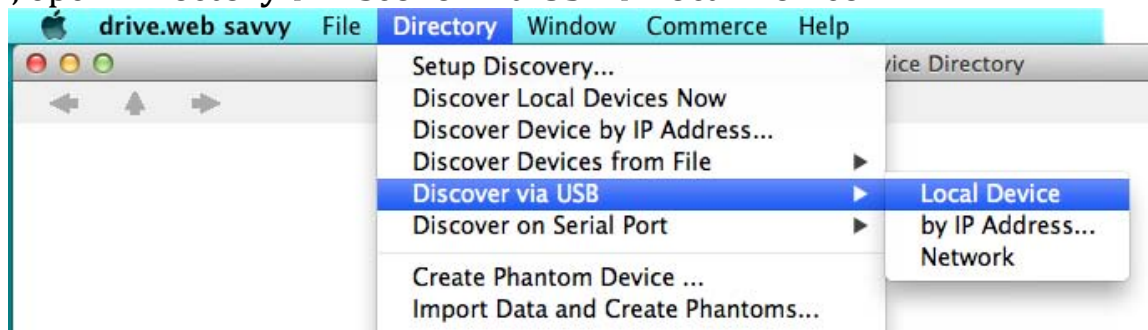
Before you continue, ensure any drives that will be updated have the Coast Stop (CSTOP, T34) signal removed and is in the inhibited state to prevent dangerous voltages and rotating machinery!

5. If the drive is on a network with other devices such as a PLC or other drive.web devices, it would be best to remove them from the network or disable all device polling to reduce network traffic during this update.
6. When you are ready to update your devices, you will need to discover the dw221 in savvy. There are a few ways to discover devices depending upon whether you are using Ethernet or USB.

For Ethernet, open **Directory→Discover Local Devices Now**



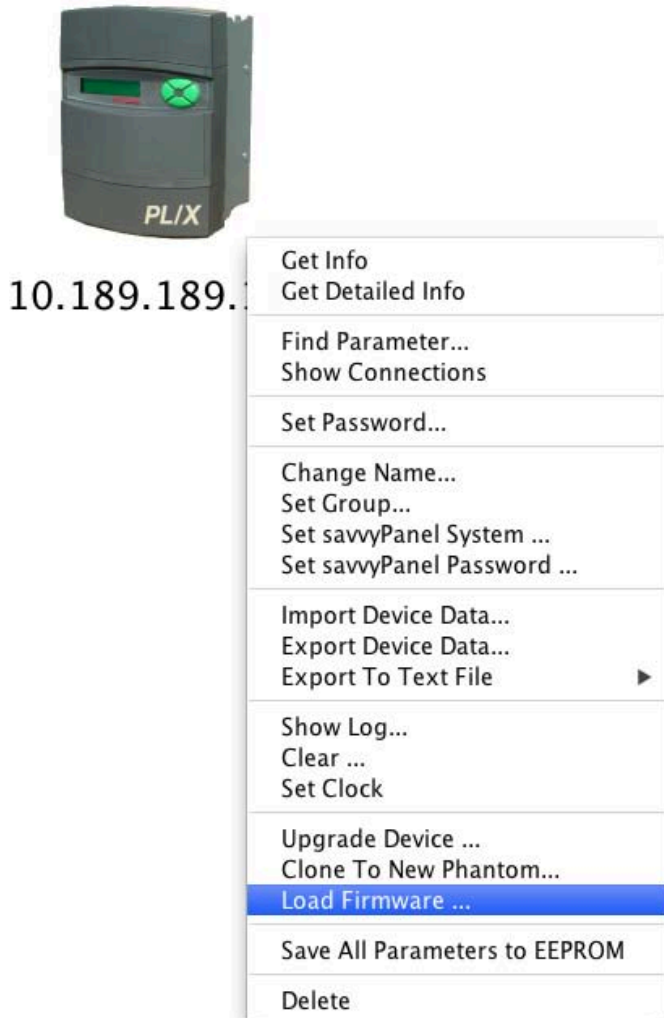
For USB, open **Directory→Discover via USB→Local Device**



7. This upgrade will not modify the program in the device; however, as a precaution, a backup of the entire system should be made before proceeding. Open **Directory→Export Data ...** and select any devices that are part of this system.

8. You must update the firmware in the dw221 mounted in your drive to version 0x2023 (or later) BEFORE you can update the firmware in your drive! The **Load PL-series Software** option will not be available until you do so! Right-click on the device to open the device Contextual Menu. Select **Load Firmware ...**

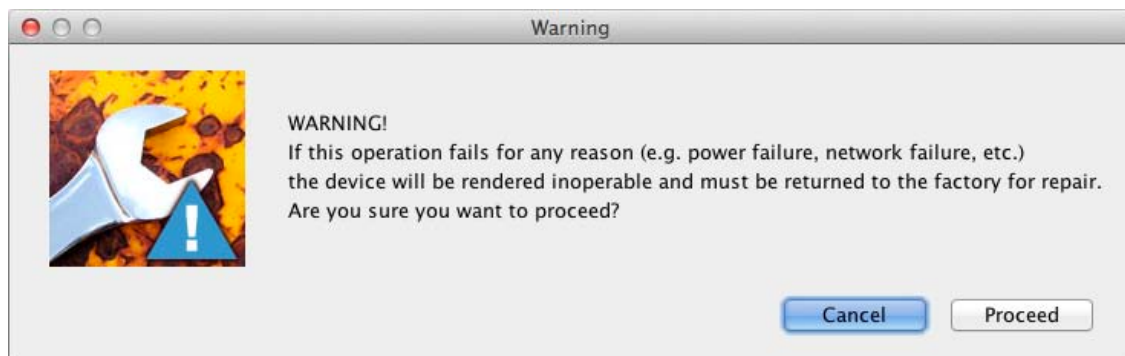
This is how the menu will look before the dw221 if the firmware is earlier than 0x2023.



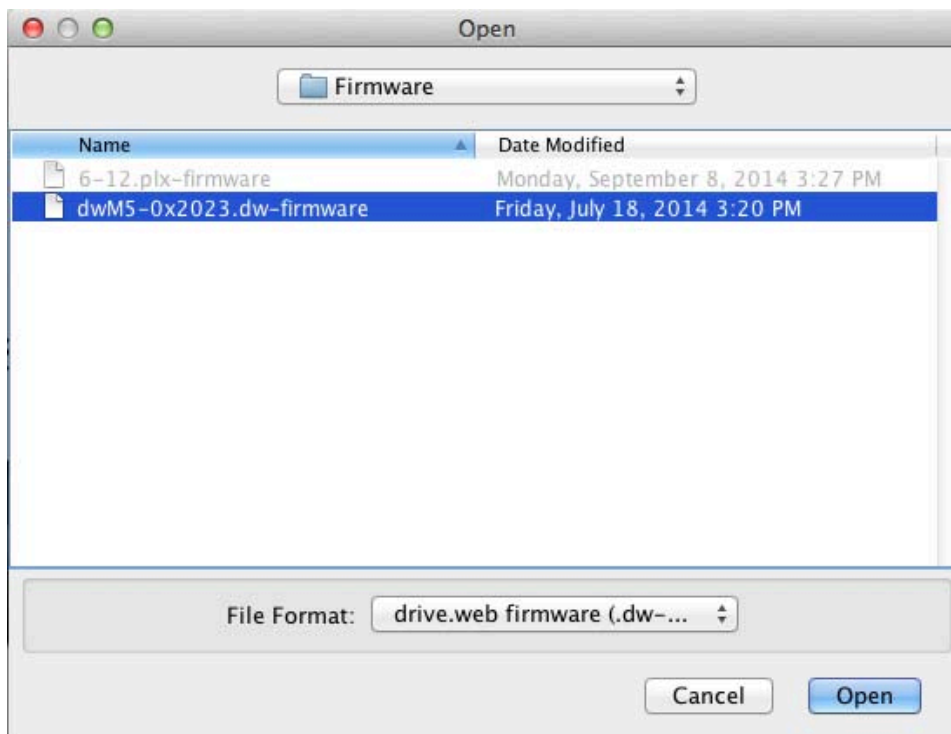
After the update, the **Load PL-series Software ...** menu item will be available.



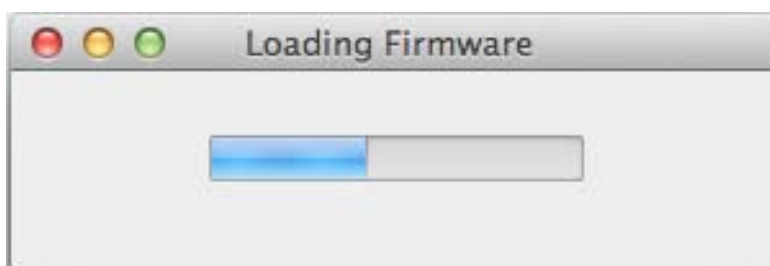
9. Before you can select the firmware file, a warning dialogue will open. PLEASE ENSURE YOU HAVE A ROBUST CONNECTION TO THE DEVICE BEFORE PROCEEDING! If you are ready to update the firmware, click Proceed.



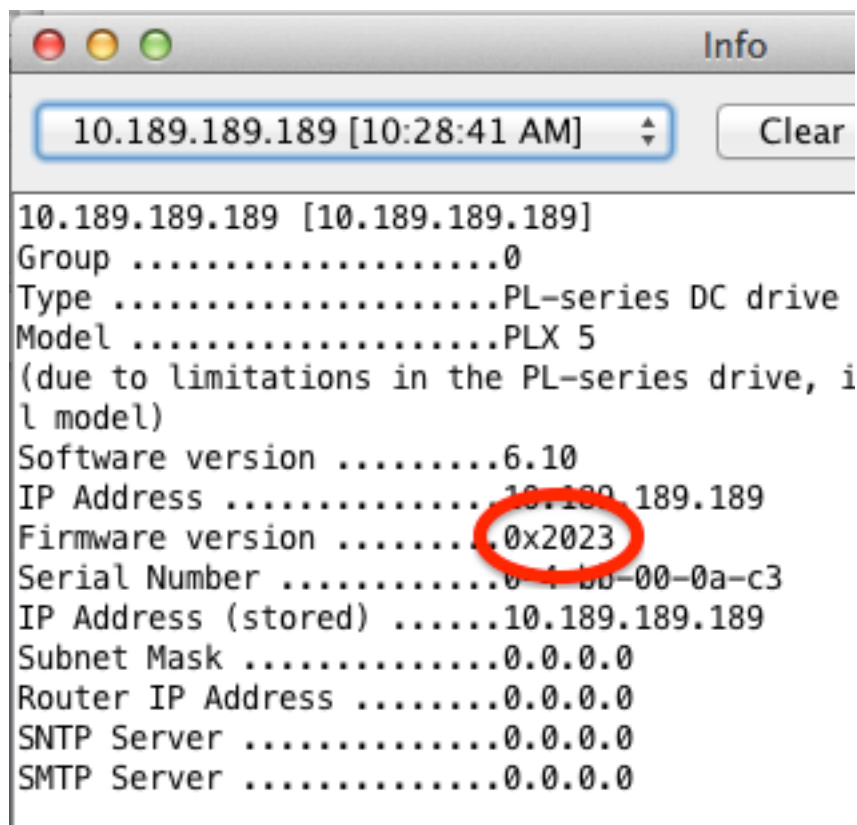
- 10.** Navigate to the directory that contains the file dw21x_and_dw22x-v2xxx.dw-firmware and select it. **DO NOT INTERRUPT THE PROCESS ONCE FILE HAS BEEN SELECTED!**



- 11.** A progress bar will appear to show the firmware being loaded. The device will restart and will be rediscovered once the update has been completed. If you are using USB discovery, you may need to rediscover the device manually after the Loading Firmware dialogue has closed. This update takes about 10 seconds to complete.



12. To ensure the firmware has been successfully upgraded, open the device Contextual Menu again and select **Get Info**. The Firmware Version should read the version number you just installed. You may now continue to the drive firmware update.



Update your PL-Series Drive



CAUTION

If there is an interruption while the drive is being updated, there will be an adornment on the drive in savvy indicating a device comms failure. Normally, the adornment will disappear after completion of a successful update. If it persists, you will need to confirm the drive's software has been corrupted. Go to the front panel of the drive and try to navigate using the keypad. If the MMI display is not navigable, cycle power and confirm the display shows a black bar across the top line. IF YOU SEE THIS BLACK BAR TURN OFF DRIVE IMMEDIATELY TO PREVENT DAMAGE TO THE DRIVE! You will need to contact technical support for instructions how to recover the drive.



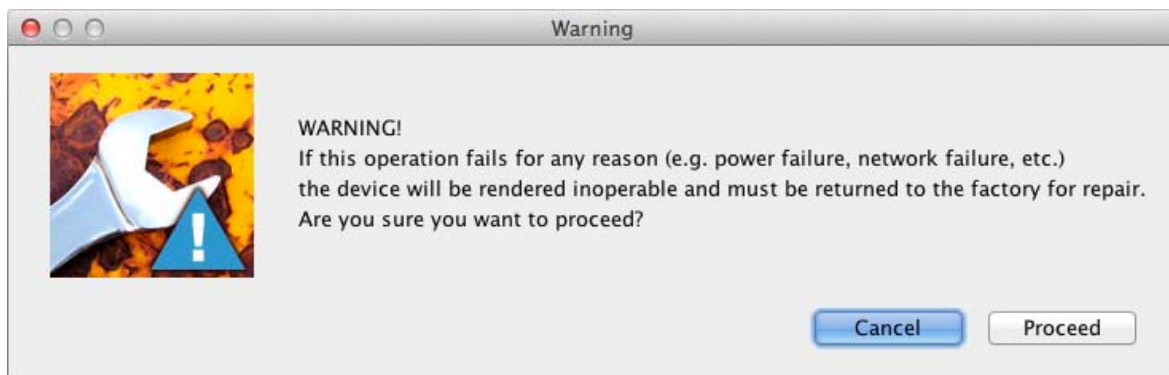
10.189.189.189



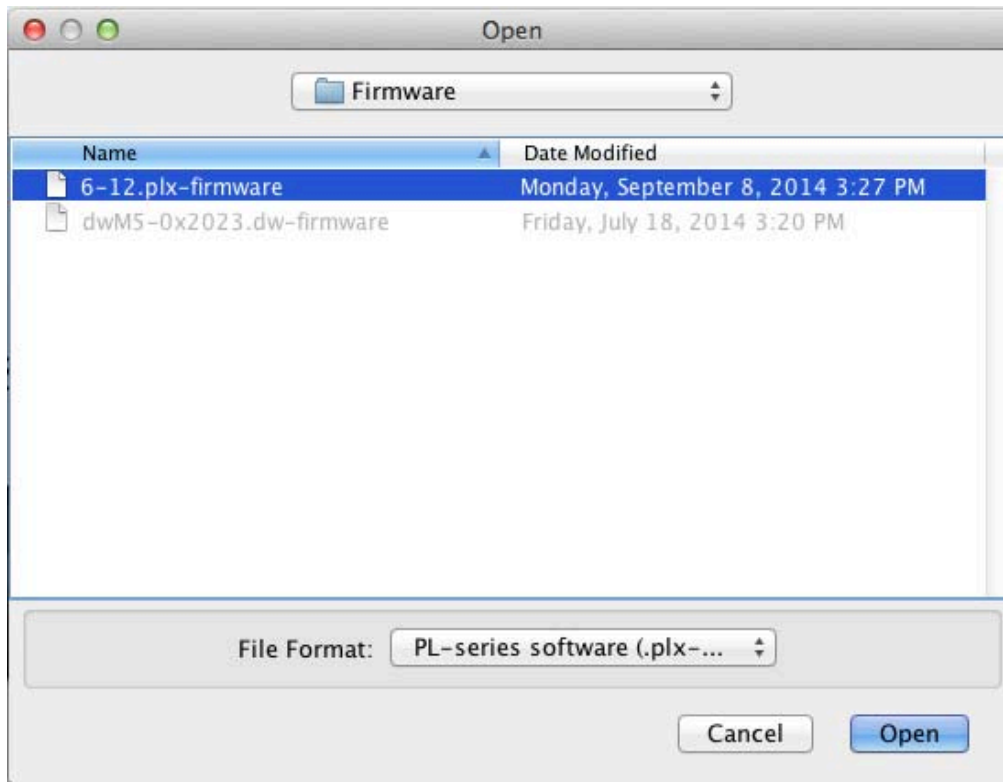
13. Right-click on the device to open the device Contextual Menu. Select **Load PL-series Software ...**



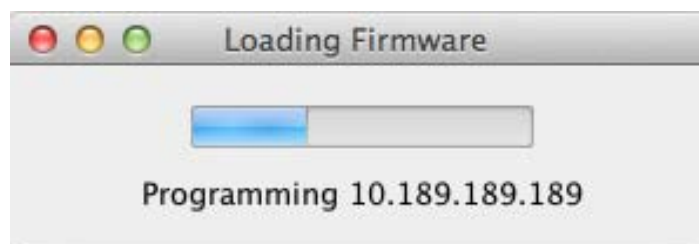
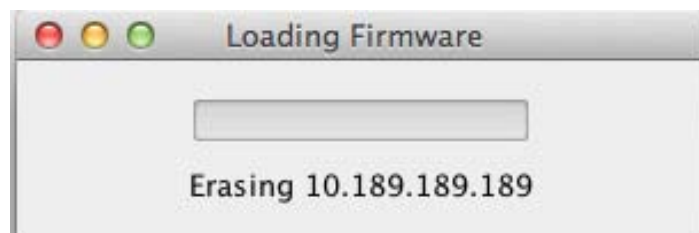
14. Before you can select the firmware file, a warning dialogue will open. PLEASE ENSURE YOU HAVE A ROBUST CONNECTION TO THE DEVICE BEFORE PROCEEDING! If you are ready to update the firmware, click Proceed.



- 15.** Navigate to the directory that contains the file pl-series_v6-xx.plx-firmware and select it.
DO NOT INTERRUPT THE PROCESS ONCE FILE HAS BEEN SELECTED!



- 16.** A progress bar will appear to show the firmware being loaded. This update takes about 20 seconds to complete. The device will restart and will be rediscovered once the update has been completed. If you are using USB discovery, you may need to rediscover the device manually after the Loading Firmware dialogue has closed.



17. To ensure the firmware has been successfully upgraded, open the device Contextual Menu again and select **Get Info**. The Software Version is shown in the Info window. Confirm the Software Version in the MMI display as well. The display should read the firmware version you are loading, **SOFTWARE VERSION Issue: 6.xx**



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10.189.189.189 [3:35:06 PM]
.189.189.189 [10.189.189.189]
oup .....0
pe .....PL-series DC drive
del .....PLX 5
ue to limitations in the PL-series drive, i

ftware version .....6.12
Address .....10.189.189.189
rmware version .....0x2023
rial Number .....0-4-bb-00-0c-9a
Address (stored) .....10.189.189.189
bnet Mask .....0.0.0.0
uter IP Address .....0.0.0.0
TP Server .....0.0.0.0
TP Server .....0.0.0.0
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18. You have completed all required updates. **Reassert the Coast Stop signal and ensure proper operation of the machinery, including the E-Stop, before returning to normal operation.**

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