

Firmware Update Manual: Prime Series

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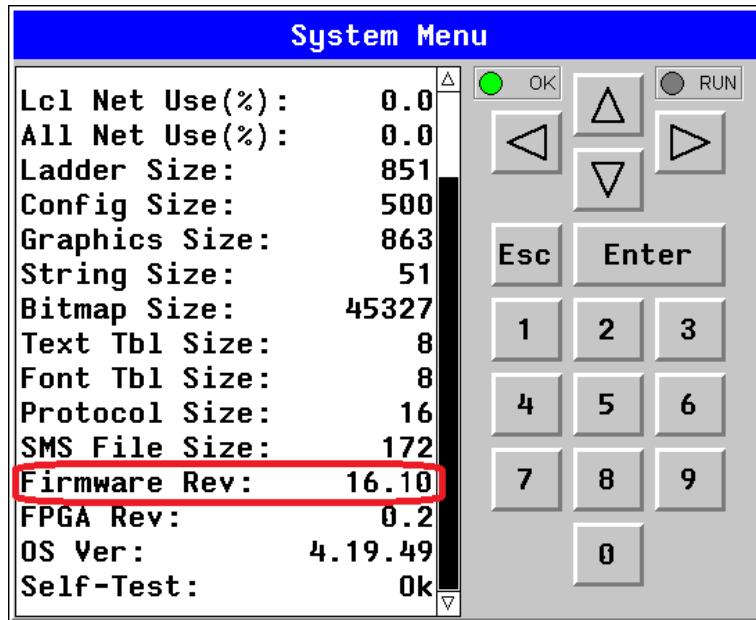
Introduction

Use these instructions to update or change firmware on the Horner OCS Prime Controllers.

WARNING: Firmware updates should only be performed when the equipment being controlled by the OCS is in a safe, non-operational state. Communication or hardware failures during the firmware update process can cause the controller to behave erratically resulting in injury or equipment damage. Confirm that the functions of the equipment work correctly following a firmware update before returning the OCS to an operational mode.

How to Check for Current Firmware Revision

To check the firmware revision on a controller, open **System Menu > View Status**.




Upgrading Firmware for XL Prime Series (FW16.10 to 16.32)


NOTE: Use a formatted single partition microSD card or USB drive. It is essential that there is not a bootable partition nor associated boot files on the card or drive.


1. Download firmware files from the Horner Automation website:

<https://hornerautomation.com/controller-firmware-cscan/>

2. Extract the folders from the downloaded zip file.
3. Copy the following files/folders to the root directory of the microSD card or USB drive

 Images

 Options

 release

4. Insert the microSD card or USB drive into the XL Prime OCS.
5. Update the firmware using one of the following methods:
 - [System Menu](#)
 - [System Register Bits](#)


Upgrading Firmware for XL Prime Series (FW 17.02 or later)

NOTE: Use a formatted single partition microSD card or USB drive. It is essential that there is not a bootable partition nor associated boot files on the card or drive.

1. Download firmware files from the Horner Automation website:

<https://hornerautomation.com/controller-firmware-cscan/>

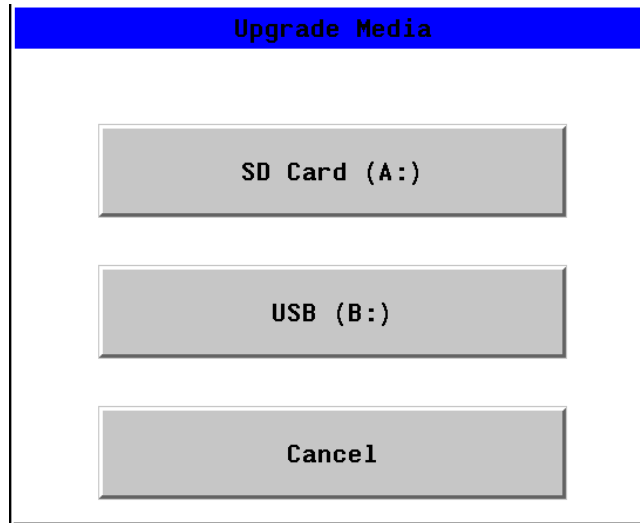
2. Extract the folders from the downloaded zip file.
3. Copy the following zip file into the root directory of the microSD card or USB drive

 XLPrime_fullset

4. Insert the microSD card or USB drive into the XL Prime OCS.
5. Update the firmware using one of the following methods:
 - [System Menu](#)
 - [System Register Bits](#)

Firmware Upgrade Using the System Menu

1. Insert the microSD card / USB (having proper firmware folders) to XL Prime OCS.
2. Press and hold the **System** button for several seconds to display the system recovery screen.
3. Select the **System Upgrade** option to display the following Upgrade Media window.



4. Select **SD Card (A:)** for upgrading firmware from microSD card or **USB (B:)** for upgrading firmware from USB. The firmware upgrade will begin following an announcement.

System Register Bits Used for Firmware Upgrade

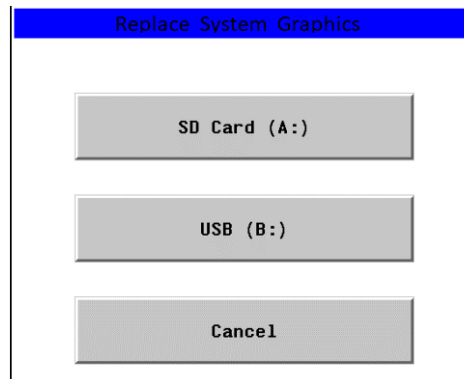
- a. **%SR154.9** - Set by user to upgrade firmware using microSD card.
- b. **%SR154.10** - Set by user to upgrade firmware using USB.
- c. **%SR154.11** - Set by firmware to request confirmation for upgrading firmware, resetting %SR154.9 / %SR154.10. When user resets SR154.11, the upgrade process begins.
- d. **%SR154.12** – Setting this bit high (ON) will not retain programs / variables after firmware update. Setting this bit low (OFF) will retain programs / variables after firmware update.
- e. **%SR154.14** – If the firmware upgrade is not required, then %SR154.14 will be set. For example: In case firmware on OCS and on the microSD / USB is same.
- f. **%SR154.15** – This bit will be set by firmware if there is any error in updating firmware such as a missing firmware file.

User Configurable Splash Screen and Slide Key

A custom splash screen and slide key (applicable to XLW Prime only) can be updated on the OCS Prime units.

NOTE:

- User must create the **splash.jpg** with the correct resolution as per the model used.
 - XL10 Prime – 640 x 480
 - XL6 Prime – 800 x 480 (viewable area is offset from the left edge by 42 pixels).
 - XLW Prime – 800 x 480
 - **Key7.bmp** used for XLW prime OCS should be 68 x 480 resolution.
 - XL4 Prime – 320 x 240
 - XL7 Prime – 800 x 480
- The custom splash screen must be a .jpg image file with the filename **Splash.jpg**.
- The custom function key slide-out image must be a .bmp file with the filename **Key7.bmp**.
- Place the custom files on a USD or the USB and then into the OCS.
- Press and hold the **System Key** until the **System Recovery Screen** is displayed.
- Select **Replace System Graphics**.
- Select the correct file path. If valid custom image files are found in the selected path of the USD or the USB, then the OCS prime unit will be updated with those files.



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