



# UPGRADE KIT for Color OCS451, 551, and 651

HE500UPGX51

## 1 INTRODUCTION

The following instructions cover the installation of the Upgrade Kit (UPGX51) for Color OCS models including HE500OCS451, OCS551, and OCS651. This upgrade kit provides significant enhancements to the Ethernet functionality of the SVGA OCS units.

1. It upgrades the physical Ethernet connection from 10Mbit to 100Mbit.
2. The new Ethernet connection supports Cscape programming, including single-point-of-connect functionality. Single-point-of-connect functionality allows any OCS on the same Ethernet or CsCAN network to be programmed from a single connection. Previously, that connection had to be serial (RS-232). After the SVGA upgrade, that connection can be serial OR Ethernet.

**Note: For full credit to be issued on the HE500UPGX51, the unit needs to be returned undamaged to Horner APG.**

## 2 WHAT UPGRADE KIT CONTAINS

The Upgrade Kit contains:

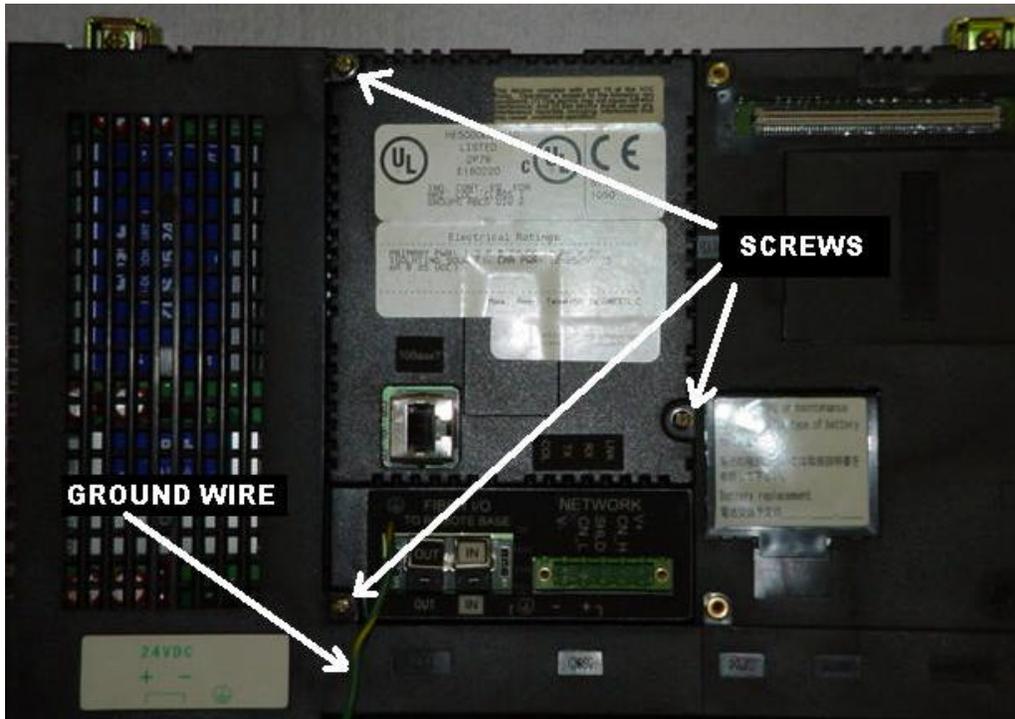
- a. one Upgraded OCS Control Board
- b. one CsCAPE Software CD, Version 6.2

## 3 UPGRADE PROCEDURES

- 1). Remove power to the unit.
- 2). Re-apply power to the unit while holding the System and F5 key on the Color OCS. This step is required to verify that a current version of the bootloader is loaded to support the logic board upgrade. A blue screen appears.
- 3). If the version is 0.08 or higher, then proceed to step 4. Otherwise, unit needs to be sent in to Horner APG for the upgrade. Be sure to follow the Horner RMA process, which is referred to later in this datasheet.
- 4). If a copy of the program in the unit is not archived on your PC, it is recommended that you upload the program from the unit.
- 5). Remove power from the unit.
- 6). Remove the fiber connections, Ethernet cable, and the CAN wiring if applied.

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- 7). Remove the ground wire from the earth ground on the terminal strip. See **Figure 1** for the location of the ground wire.
- 8). Remove the screws from the plastic case of the existing hardware. See **Figure 1** for the location of the screws. The unit shown in the illustration is an HE500OCS551.
  - The same hardware is used on all of the SVGA screens but the location on the display may differ slightly.
- 9) Remove the old hardware from the unit.



**Figure 1**

- 10). Place the upgrade onto the display. Take caution with the alignment of the connection between the display and the upgrade board. The unit should fit into place with very little effort.
- 11). After the unit has been properly placed onto the unit, install the screws back into the 3 locations.
- 12). Re-install the CAN and the fiber connections. The Ethernet connection is now applied to the location on the display labeled LAN. There is not an applied label, but there is a label molded into the plastic of the unit.
- 13). Re-apply power to the unit pressing the System and the F5 keys when power is applied. This brings up the blue bootloader screen on the unit.

- 14). The firmware needs to now be loaded into the unit. At this time connect a communication cable between the OCS port 1 and your PC.
- 15). Verify that **Cscape, Version 6.20** is loaded on your PC. This can be done through the splash screen when Cscape is first opened or through **Help, About Cscape**.
- 16). Open Cscape and use the Firmware Update Wizard to update the unit. The Firmware Update Wizard is located under the **File** menu.
- 17). Click on Firmware Update Wizard. The software will not find the model of the unit in the Product Type pull down menu. See **Figure 2**.



**Figure 2**

- 18). Select the type from the pull down menu and press the OK button.
- 19). Press the Start Button when the firmware update screen appears.
- 20). Upon a completion of the firmware download, the unit needs to be power cycled.
- 21). At this time the program can be downloaded to the unit.
- 22). Contact Horner APG for a Return for Credit RMA on the HE500UPGX51.
- 23). Re-package the old logic board in the original box with the unit wrapped in the bubble wrap that the upgrade kit came in. It is important that the unit be packaged properly.

**FOR FULL CREDIT TO BE ISSUED ON THE HEUPGX51, THE UNIT NEEDS TO BE RETURNED UNDAMAGED.**

- 24). Any questions can be addressed by contacting the Horner APG Technical Support Department at 1-877-665-5666 extension 3 or through e-mail at [techspt@heapg.com](mailto:techspt@heapg.com).

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