

## GERBER SOLARA UV2™ Firmware Version D


This document contains the release notes for this version of GERBER SOLARA UV2 firmware.

### Required Software

- Microsoft® Internet Explorer (ver 5.5 or later) or comparable web browser. The selected computer must be networked to the GERBER SOLARA UV2 to download the firmware update. An active internet connection is not required.

### Obtaining the firmware from the GSP web site

If the SOLARA UV2 firmware is not delivered on a CD, you can download it from the GSP web site.

1. Using a web browser, go to [www.gspinc.com/support/downloads/printers](http://www.gspinc.com/support/downloads/printers) to open the printers download page.
2. Click Download  to copy the self-extracting file (Solara\_UV2\_D.004.exe) to your computer. Make note of the location of the downloaded file as you will need it in the next step.
3. Double-click the downloaded exe file (Solara\_UV2\_D.004.exe) to unzip it. Make note of the location of the downloaded file (Solara\_UV2\_D.004.gsp) as you will need it when updating the firmware.

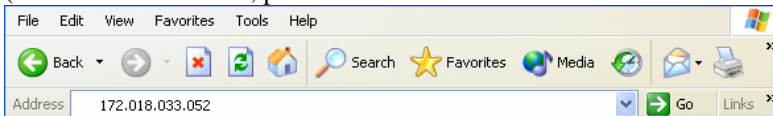
### Updating the GERBER SOLARA UV2 firmware

The GERBER SOLARA UV2 firmware is updated using a web browser. The SOLARA UV2 home page contains a "Downloader" link. Clicking on this link brings up the "SOLARA Loader" page which allows the new firmware file to be selected and sent to the printer. The upgrade process can take anywhere from 10 to 15 minutes depending on the size of the upgrade and the speed of your computer.

**IMPORTANT NOTE:** Make sure you have the previous version of firmware loaded (C.000) before installing the current firmware update. If you currently have version A.000, you must load B.000 and C.000 before attempting to load this version. Serious system failure will result from loading firmware out of order. Firmware versions B.000 and C.000 can be found at:

[www.gspinc.com/support/downloads/printers](http://www.gspinc.com/support/downloads/printers)

1. Verify the location of the SOLARA UV2 firmware file (ver D.004) on your local drive (downloaded from the GSP® web site) or on the SOLARA UV2 firmware CD.
2. Verify that there is a computer with an internet browser either directly connected to the printer or connected to a network which is connected to the printer. The computer does not have to be connected to the internet to access the printer web pages.
3. Open a web browser menu on a computer connected to the printer. (The internet connection does not have to be active.)
4. Enter the IP Address for the specific GERBER SOLARA UV2 you wish to access as the web address in the web browser and press enter. (Do not use any slashes or colons.)  
(To find the IP address, press **F3 SETUP** > **F1 NETWORK** > **F1 IP ADDRESS** on the control panel)



5. If done correctly the Home page should appear on your web browser. There is a list of links on the right side of the screen to the other pages in the program.
6. On the Main Page, click on "Downloader" and wait for the system to enter the Loader Interface page.
7. Browse for the SOLARA UV2 firmware file with a GSP filename that you located in step 1, (for example: Solara\_UV2\_D.004.gsp) and click on "Download".



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8. A web page is displayed showing a table of firmware versions. One column is the firmware versions in the file you selected; the other column is the currently loaded version in the printer. There is a column showing what action the Loader will take based on the versions, such as upgrade, refresh (keeping the same version) or revert (going back to a previous version).
9. Click on "Continue Programming" to begin the loading process. (Click on "Return to Main Menu" to cancel the download.)
10. The loading process may take several minutes to complete as each firmware component is loaded into its corresponding system within the printer.

**IMPORTANT NOTE:** Do NOT turn off the machine or disconnect the network cable during the download process, this will interrupt the download and corrupt the firmware and damage the control system. When downloading new firmware do NOT close, minimize, or change the web browser window until the download process is finished or installation errors may occur. For some firmware components, the printer may reboot automatically. This is a normal event and no user intervention is required.

## Updating the ONYX<sup>®</sup> driver

To take full advantage of this new firmware, download the latest GERBER SOLARA UV2 driver and material profiles from the Gerber website [www.gspinc.com](http://www.gspinc.com). The latest driver is automatically included when you download new material profiles.

1. Go to [www.gspinc.com](http://www.gspinc.com) and navigate to the Support/Downloads section and select Profiles. Click on the link for the GERBER SOLARA UV2 profiles for ImageRIP™ by ONYX software to go to the ONYX download site.
2. On the ONYX website, choose the appropriate software Version, Printer Model (Gerber), Printer, and Media Vendor (Gerber). Then select the specific profiles you wish to use from the list provided. (All downloads include the latest printer driver for the profiles. So if you only need to download the driver, just select one or more files here.)
3. Click **Order Selected Media Configurations**.
4. If you have not already registered with ONYX, you must do so before continuing. If you have already registered, login using your assigned name and password.
5. A single (.exe) file will be created for you with the latest driver and material profiles you selected. An email will be sent to the address you provided during registration with the URL address where you can download your new file.
6. Once on your computer, close all ONYX applications and double-click on the file and select Run to extract the compressed Printer Installation (PrnInst) file.
7. Double-click on the extracted PrnInst file to launch the Add Printer Wizard and install the new driver and profiles.

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## Version D.004

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### Description:

SYSTEM VERSION	CODE
<b>Build:</b>	<b>D.004</b>
<b>Raster O/S:</b>	<b>B.08</b>
<b>Raster FPGA:</b>	<b>3.3.1.255</b>
<b>Raster Downloader:</b>	<b>B.07</b>
<b>Raster Kernel:</b>	<b>A.09</b>
<b>Carriage O/S:</b>	<b>C.00</b>
<b>Carriage FPGA:</b>	<b>4.0.0.8</b>



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<b>Carriage Boot:</b>	<b>C.0a</b>
<b>Control O/S:</b>	<b>B.07</b>
<b>Control FPGA:</b>	<b>1.04</b>
<b>Control Analog FPGA:</b>	<b>6.00</b>
<b>Control Boot:</b>	<b>C.2a</b>
<b>Control EEPROM:</b>	<b>E.0</b>
<b>Control Lang:</b>	<b>A</b>
<b>Control Language Name:</b>	<b>*No Foreign Language</b>
<b>Keypad/Display:</b>	<b>B.0(930)</b>

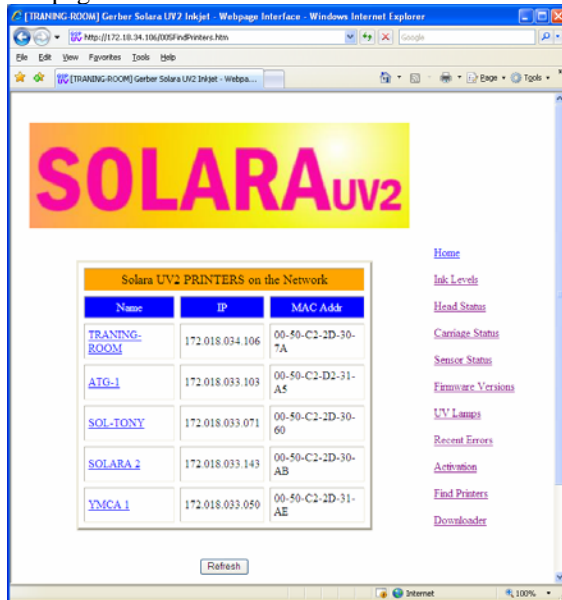
**IMPORTANT NOTE:** Make sure you have the previous version of firmware loaded (C.000) before installing the current firmware update. If you currently have version A.000, you must load B.000 and C.000 before attempting to load this version. Serious system failure will result from loading firmware out of order. Firmware versions B.000 and C.000 can be found at:  
[www.gspinc.com/support/downloads/printers](http://www.gspinc.com/support/downloads/printers)

## Firmware Features

- To insure print quality the printer will pause the job if the print heads become too hot. Printing will resume automatically after the heads have cooled.
- The main Solara UV2 webpage (Home) now displays print job information about the current job sent to or running on the printer.
- The Find Printers webpage has been added to the Solara UV2 network interface. Users with more than one Solara on the same network can quickly navigate between printers by clicking on the printer name listed on the Find Printers page. By clicking on a printer's name, that printer's webpage is accessed.
- The default printer name will now include the last two (2) digits of the MAC address to help identify specific Solara printers on the same network. (for example "SOLARA UV2-A1") Without this feature all Solara printers on a network would be displayed as only "SOLARA UV2". The user still has the option to change the printer name.
- The Downloader webpage has been re-designed and loads faster. The page will now show individual component progress and overall installation progress.
- The Downloader webpage will now display error codes and messages in the event that a firmware load is incomplete or the firmware file is incorrect.
- Firmware will now continue to download uninterrupted even if the browser display fails to refresh.
- The material width scan now displays more specific messages if there is a scan error when detecting the width. These new messages make it easier to identify and correct the issue.  
**(See Appendix A)**
- You can now set the manual material width in 0.1 inch increments to better accommodate metric conversions and provide more accurate results.
- You now have the option to disable the material hold-down fans. This is not recommended for normal operation, but may prove useful when dealing with light-weight specialty materials. From the Main Menu press Setup (F3) then Vacuum (F4).
- To extend print head life, the print head heaters now turn off after 60 minutes idle time. When the printer comes out of idle mode (or upon powering up the printer) the message "PRINT HEADS WARMING UP!" may display if the print heads are not at operating temperature.
- GERBER SOLARA UV2 can now accommodate full bleed jobs on rigid stock, allowing the printing to go beyond the perimeters of the sign blank. Full Bleed mode is chosen in the SELECT MATERIAL TYPE menu – F3, Rigid Bleed. For complete instructions see the Tech Bulletin, "Printing Full Bleed on Rigid Material" or the new *GERBER SOLARA UV2 Owner's Guide*.

## New Procedures

- The Ink Handling options in the SETUP menu (which include **Dry Load**, **Clear Line**, and **Purge**) have been moved to the Ink Service menu. From the Main Menu press Operate (F4), then Ink (F2), then Service (F3).
- The Find Printers webpage has been added to the Solara UV2 network interface. Users with more than one Solara on the same network can quickly navigate between printers by clicking on the printer name listed on the Find Printers page. By clicking on a printer's name, that printer's webpage is accessed.



- The Encoder test has been redesigned to include a comparison of encoder counts and motor steps. Y-axis calibration should be performed prior to the Encoder test. The printer will display error codes and messages in the event that the test shows inconsistencies. The new Encoder test is located in the first TEST JOBS menu (SETUP MENU >DIAGNOSTICS > TEST JOBS)
- The Bi-directional calibration test has been changed to produce more accurate results. The printed numbers on the test job are now in increments of one (instead of four). The rest of the procedure remains the same.



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## Appendix A:

The material width scan now displays more specific messages if there is a scan error when detecting the material width. These new messages make it easier to identify and correct the issue.

<b>Error Message</b>	<b>Material</b>	<b>Possible Causes and Solutions</b>
ERROR: MATERIAL SCAN No Shield Hole Left Adjust LF Shield Pos (Press a Key)	Vinyl or Rigid	Carriage scanned more than 12" from Home without finding the hole in the LEFT shield. Check LEFT shield alignment. Check for dust, debris, and/or obstructed shield hole and/or slot in platen. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN LF Shield Hole Small Clean LF Hole Debris	Vinyl or Rigid	Carriage located LEFT shield hole, but the hole was less than 1/4" in width. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen.
ERROR: MATERIAL SCAN LF Shield Hole Large Clean Shield Surface	Vinyl or Rigid	Carriage located LEFT shield hole, but the hole was larger than 1/2" in width or the edge of the hole was not found after looking 3/4". Check for dust or debris on shield surface. Check LEFT shield alignment. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN LF Hole Near Edge Clean Holes/Surface	Vinyl or Rigid	The edge of the LEFT shield was found too close to the hole in the shield. Check for dust or debris on shield surface. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen. Check for proper alignment / installation of material edge sensor.
ERROR: MATERIAL SCAN No LF Shield Gap Move Shield .25-.5"	Rigid	No gap was found between the LEFT shield edge and the material edge after searching for 2". Adjust the LEFT shield and/or the material such that the gap is between 1/4" and 3/4" wide. Check for dust, debris, and/or partially obstructed slot in platen.
ERROR: MATERIAL SCAN LF Shield Gap Small Move Shield .25-.5"	Rigid	The gap between the LEFT shield and the edge of the material is less than 1/4". Adjust the LEFT shield and/or the material so that the gap is between 1/4" and 3/4" wide. Check for dust, debris, and/or partially obstructed slot in platen.
ERROR: MATERIAL SCAN LF Shield Gap Large Move Shield Closer	Rigid	The gap between the LEFT shield and the edge of the material is more than 3/4". Adjust the LEFT shield and/or the material such that the gap is between 1/4" and 3/4" wide. Check for proper alignment / installation of material edge sensor.
ERROR: MATERIAL SCAN LF Matl Not Found ReLoad Matl to Left	Rigid	The material edge was not found after scanning 2". Check material loading placement. Adjust the LEFT shield and/or the material so that the gap is between 1/4" and 3/4" wide. Check LEFT shield alignment. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN Undetected RT Shield Clean RT Hole Debris	Rigid	The carriage traveled to the end of travel. No RIGHT gap or RIGHT shield hole was found. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen. Check for proper alignment or installation of material edge sensor.
ERROR: MATERIAL SCAN RT Shield Gap Small Move Shield .25-.5"	Rigid	The gap between the RIGHT shield and the edge of the material is less than 1/4". Adjust the RIGHT shield and/or the material so that the gap is between 1/4" and 3/4" wide. Check for dust, debris, and/or partially obstructed slot in platen.



<b>Error Message</b>	<b>Material</b>	<b>Possible Causes and Solutions</b>
ERROR: MATERIAL SCAN RT Shield Gap Large Move Shield Closer	Rigid	The gap between the RIGHT shield and the edge of the material is more than 3/4". Adjust the RIGHT shield and/or the material so that the gap is between 1/4" and 3/4" wide. Check for proper alignment or installation of material edge sensor.
ERROR: MATERIAL SCAN RT Hole Near Edge Clean RT Hole Debris	Rigid	The edge of the RIGHT shield appears to be too close to the hole in the shield. Check for dust or debris on shield surface. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen. Check for proper alignment / installation of material edge sensor.
ERROR: MATERIAL SCAN RT Hole From Edge Clean Shield Surface	Rigid	Carriage located RIGHT shield hole, but the hole was larger than 1/2" in width or the edge of the hole was not found after looking 3/4". Check for dust or debris on shield surface. Check RIGHT shield alignment. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN Undetected RT Shield Clean Shield Surface	Rigid	The carriage scanned 1.5" past the edge of the RIGHT shield and did not find the hole in the shield. Check for dust or debris on shield surface. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen. Check for proper alignment or installation of material edge sensor.
ERROR: MATERIAL SCAN RT Shield Hole Large Adjust Right Shield	Rigid	Carriage located the RIGHT shield hole, but the hole was larger than 1/2" in width or the edge of the hole was not found after looking 3/4". Check for dust or debris on shield surface. Check RIGHT shield alignment. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN RT Shield Hole Small Clean RT Hole Debris	Rigid	Carriage located the RIGHT shield hole, but the hole was less than 1/4" in width. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen.
ERROR: MATERIAL SCAN Undetected RT Shield Adjust Left Shield	Rigid	Carriage scanned to the end of travel without finding the hole in the RIGHT shield. Check RIGHT shield alignment. Check for dust, debris, and/or obstructed shield hole and/or slot in platen. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN Undetected LF Shield Adjust Left Shield	Vinyl	Carriage scanning found a hole within 3" of the LEFT hole, where material is expected. Check for proper placement of material. Check LEFT shield alignment.
ERROR: MATERIAL SCAN Undetected RT Shield Adjust Right Shield	Vinyl	Carriage scanning found a hole between 3" and 12" of the LEFT hole, where material is expected. Check for proper minimum width material. Check for proper placement of material. Check LEFT and RIGHT shield alignment.
ERROR: MATERIAL SCAN Undetected Shield RT Adjust Right Shield	Vinyl	The carriage traveled to the end of travel. No RIGHT shield hole was found. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen. Check for proper alignment / installation of material edge sensor.
ERROR: MATERIAL SCAN RT edge too far away Adjust Right Shield	Vinyl	Based on the position of the shields, the material width exceeds the maximum allowed width. Check width of the material. Check for proper placement of material. Check LEFT and RIGHT shield alignment.



<b>Error Message</b>	<b>Material</b>	<b>Possible Causes and Solutions</b>
ERROR: MATERIAL SCAN RT Shield Hole Small Clean RT Hole Debris	Vinyl	Carriage located RIGHT shield hole, but the hole was less than ¼” in width. Check for dust, debris, and/or partially obstructed shield hole and/or slot in platen.
ERROR: MATERIAL SCAN RT Shield Hole Large Clean RT Hole Debris	Vinyl	Carriage located RIGHT shield hole, but the hole was larger than ½” in width or the edge of the hole was not found after looking ¾”. Check for dust or debris on shield surface. Check RIGHT shield alignment. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN Undetected RT Shield Adjust Right Shield	Vinyl	Carriage scanned to the end of travel without finding the hole in the RIGHT shield. Check RIGHT shield alignment. Check for dust, debris, and/or obstructed shield hole and/or slot in platen. Check for proper alignment of material edge sensor.
ERROR: MATERIAL SCAN RT Shield Gap Found Adjust Right Shield	Vinyl	Carriage scanning found a gap between the RIGHT shield and the material edge. Check for proper placement of material. Check RIGHT shield alignment.
ERROR: MATERIAL SCAN LF edge too far away Adjust Left Shield	Vinyl or Rigid	The LEFT edge of the material has been calculated to be more than 10” from the left edge of the printable area of the printer. Check for proper placement of material.
ERROR: MATERIAL SCAN RT Edge Too Near LF Adjust Right Shield	Vinyl or Rigid	The distance between the LEFT and RIGHT edges of the material have been calculated to be less than 12”. Check minimum width of the material. Check for proper placement of material. Check LEFT and RIGHT shield alignment.
ERROR: MATERIAL SCAN Motor Travel Error	Vinyl or Rigid	The motor system reported an error. Check for material jams. Check for opened main cover or shutter. Check for loss of 48 volts. Run the MotionJob and the EncoderJob diagnostics.