Retrofitting the Solaria One with the GDC SR-1000 IMB

This document describes the steps for installing an integrated media block (IMB) faceplate retrofit kit, allowing the use of the GDC SR-1000 third party IMB in Solaria One series projectors.

Affected products

These instructions apply to the following products

- Christie Solaria One
- Christie Solaria One+

Prerequisites

The following components are required to complete the installation.

- ASSY SR-1000 IMB (P/N: 003-121741-XX)—GDC-SO-1804-012 SR-1000 Standalone Integrated Media Block
- Solaria SR-1000 kit (P/N: 003-108430-XX) containing the following components:
 - Faceplate (QTY: 1)
 - Support Bracket (QTY: 1)
 - Backer Bracket (QTY: 1)
 - EMI gaskets (QTY: 2)
 - Phillips screws 4-40 (QTY: 2)
 - Locking nuts 4-40 (QTY:2)
 - Void warranty label (QTY: 1)
 - Screw M3 Hex (QTY: 3)
 - Electrostatic discharge bag (QTY: 1)





Required tools

The following tools are required to complete the installation.

- Electrostatic discharge mat
- Grounded electrostatic discharge wrist strap
- #1 Phillips screwdriver
- #2 Phillips screwdriver
- 14 mm wrench or 14 mm deep socket
- 3/16 nut driver
- 7/32 nut driver
- 1/4 socket or wrench
- 2.5 mm hex driver
- 2.5 mm ball driver

Upgrading the projector software

Before installing the faceplate kit, upgrade the projector software to Solaria Main Software v4.8.1(3).

- 1. On the touch panel controller (TPC), tap Menu > Administrator Setup > Upgrade.
- 2. Tap Upload.
- 3. Browse to the location of the software upgrade file.
- 4. Tap the upgrade file and tap **Open**.
- 5. In the Available Upgrade Files list, tap the upgrade file loaded in the previous step.
- 6. Tap Next.



- 7. To upgrade all components in the upgrade package, select **Upgrade Different Components** Only (Recommended).
- 8. Tap Next.

Turning off the projector

Before removing the card cage, turn off the projector and disconnect it from AC power.

- 1. To turn off the lamp, tap and hold the lamp button on the touch panel controller (TPC).
- 2. To turn off the projector, tap and hold the power button on the TPC. The projector enters cool down mode.
- 3. Allow the lamp to cool for a minimum of 10 minutes.
- 4. Unplug the AC power cable from the projector.

Disassembling the card cage faceplate and board assembly

Complete the following procedure to remove the faceplate and board assembly from the projector and take apart the components.

- 1. Place the electrostatic discharge mat on a clean flat surface.
- 2. Put on the grounded electrostatic discharge wrist strap.
- 3. Cut the void warranty label.



4. Using a #2 Phillips® screwdriver, remove the eight screws securing the card cage faceplate to the card cage. Set the screws aside.

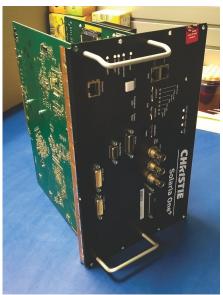




5. Using the two handles, pull the card cage faceplate assembly out of the card cage.



6. Place the assembly on the electrostatic discharge mat as shown.



7. Using a 14 mm wrench or deep socket, remove the GEN Lock, Sync Out, and LTC Out nuts. Set the nuts and washers aside.

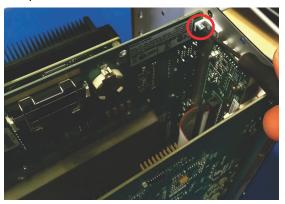




8. Using a 3/16 nut driver, remove the two nuts on either side of the AES3 output. Set the nuts aside.

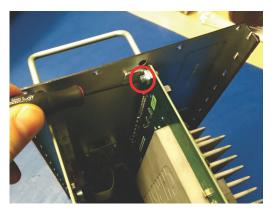


9. Using a 2.5 mm ball hex driver, remove the left screw securing the Christie IMB to the faceplate. Set the screw aside.

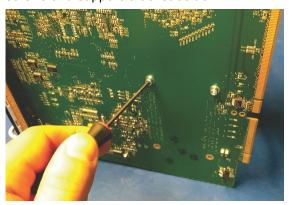


- 10. Rotate the assembly 180 degrees.
- 11. Using a 2.5 mm ball hex driver, remove the right screw securing the Christie IMB to the faceplate. Set the screw aside.

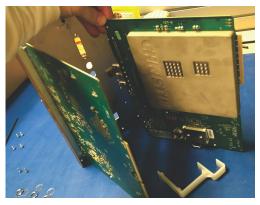




12. Using a 2.5 mm hex driver, remove the two screws on the bottom of the PIBS1 board. Set the screws and support bracket aside.



13. Carefully separate the Christie IMB from the faceplate. Set the Christie IMB aside.

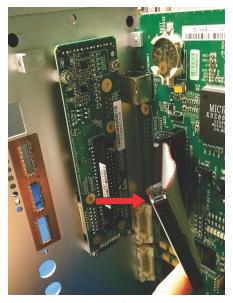


14. Using a 3/16 nut driver, remove the 3D Sync, RS 232 PIBS1, HDMI A/LEFT, and HDMI B/RIGHT nuts. Set the nuts aside.





15. Disconnect the harness from the PIB faceplate board.



16. Using a #1 Phillips $^{\$}$ screwdriver, remove the two screws securing the PIBS1 board to the faceplate. Set the screws aside.



17. Carefully separate the PIBS1 board from the faceplate. Set the board aside.



18. Using a 7/32 nut driver, remove the four nuts securing the PIB faceplate board to the faceplate and remove the PIB faceplate board and four spacers. Set the nuts, board, and spacers aside.



19. Using a #1 Phillips® screwdriver, remove the four screws securing the handles to the faceplate. Set the handles and screws aside.



20. Remove the EMI gasket and set it aside.



Installing the faceplate kit

Complete the following procedure to install the GDC SR-1000 IMB to the Solaria One faceplate provided in the conversion kit.

1. Place the GDC SR-1000 IMB onto the electrostatic discharge mat.



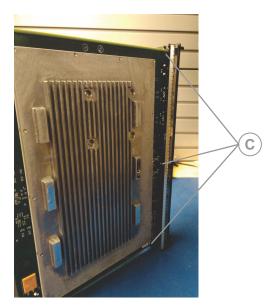


2. Using a 14mm deep socket or wrench, remove the REF-IN nut and washer (A) and set them aside.



- 3. Remove IMB license label plate using two Phillips #1 screws (B) and set it aside.
- 4. Using a #1 Phillips screwdriver, remove the three 4-40 screws securing the SR-1000 board to the SR-1000 faceplate (C).



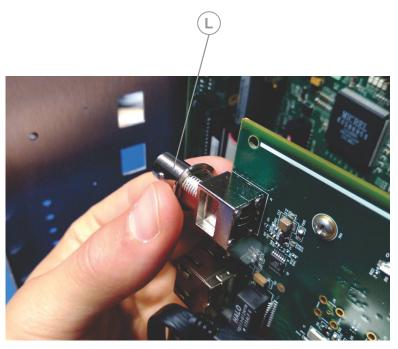


5. Carefully separate the SR-1000 board from the faceplate.

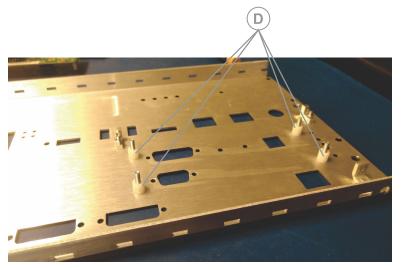


6. Remove the washer (L) from the SR-1000 REF-IN connector.



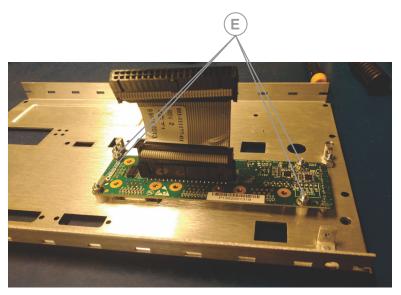


- 7. Set the SR-1000 board aside.
- 8. Discard the SR-1000 faceplate.
- 9. Obtain the SR-1000 conversion kit parts.
- 10. Place the four white spacers set aside in step 18 of the disassembly procedure onto the threaded inserts on the faceplate (D).



- 11. Place the PIB faceplate board set aside in step 18 of the disassembly procedure onto the spacers.
- 12. Secure the PIB faceplate board to the faceplate using the four nuts set aside in step 18 of the disassembly procedure (E). Torque the nuts to 10 in-lb.



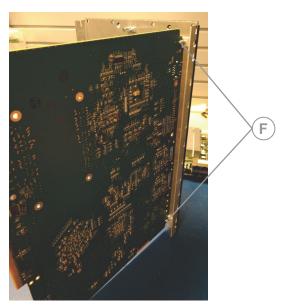


13. Insert the PIBS1 board and insert the 3D Sync, RS 232 PIBS1, HDMI A/LEFT, and HDMI B/RIGHT nuts removed in step 14 of the disassembly procedure to hold the board in place. Do not fully tighten the nuts.



14. Using the two screws set aside in step 16 of the disassembly procedure, secure the PIBS1 board to the faceplate (F). Torque the screws to 10 in-lb.



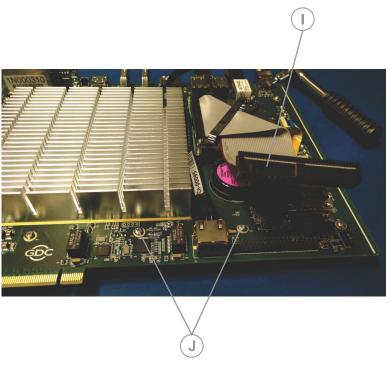


- 15. Torque the 3D Sync, RS 232 PIBS1, HDMI A/LEFT, and HDMI B/RIGHT nuts to 10 in-lb.
- 16. Connect the PIB harness (G) between the PIBS1 board and the PIB faceplate board.

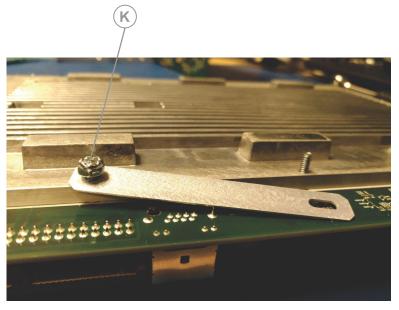


- 17. Using a 2.5 mm hex driver, install the support bracket included with the SR-1000 kit onto the PIBS1 board with two 3mm HEX screws (H) removed in step 12 of the disassembly procedure.
- 18. On the SR-1000 IMB board, disconnect the harness (I).



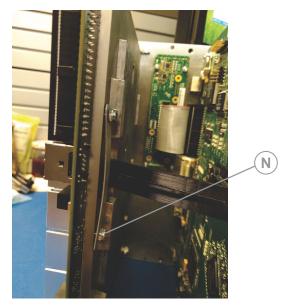


- 19. Remove two 4-40 Phillips #1 screws (J) and install two 4-40 x $\frac{1}{2}$ Phillips #1 long screws provided in the conversion kit.
- 20. Re-connect the harness.
- 21. Flip the SR-1000 IMB board and place the backer bracket as shown. Using a $\frac{1}{4}$ nut driver, install one nut (K) flush with the top of the screw.

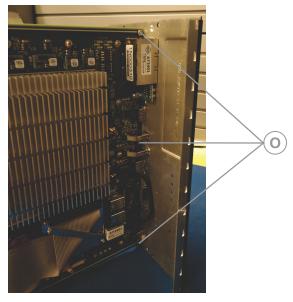


- 22. Place the SR-1000 board into the faceplate opening.
- 23. Place the backer bracket as shown and secure the second nut (N) flush with the top of the screw as shown. Self-locking nuts don't have to be fully tightened.





24. Using a 2.5 mm hex driver, loosely install all three 3mm HEX screws (O) provided with the conversion kit. When all three screws are installed loosely, tighten them to 8 in-lb.



25. Replace the previoulsy removed EMI gasket (M).



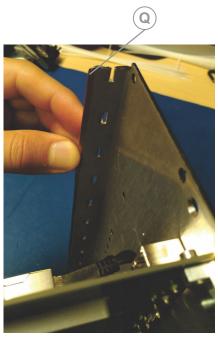


26. Install the EMI gasket tabs (P) through the holes on the sides of the conversion faceplate as shown.

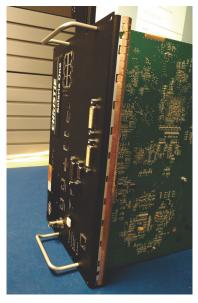


27. Pull the long flange of the EMI gasket over the edge of the faceplate (Q).



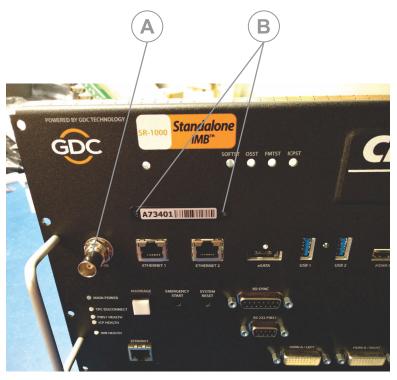


28. Reattach the handles with the #1 Phillips screws removed in step 19 of the disassembly procedure. Torque the screws to 6 in-lb.



29. Install previously removed washer and nut (A) and secure them with 14mm deep socket or wrench.





- 30. Install previously removed IMB license label plate (B) with two Phillips #1 screws.
- 31. Install the card cage faceplate assembly in the projector.
- 32. Using the eight #2 Phillips® screws removed in step 4 of the disassembly process, secure the card cage faceplate to the card cage. Torque the screws to 10 in-lb.
- 33. Apply the void warranty label as shown.



- 34. Place the Christie IMB (without the faceplate) into the provided electrostatic discharge bag.
- 35. Place the bag into the box, as shown, and cover with the top foam lid.



36. Return the Christie IMB to Christie.

Enabling the IMB

After installing the IMB in the projector, you must enable it and activate marriage.

Complete the Marriage wizard to display secure content. Marriage permissions are required to complete marriage and only Christie accredited technicians are authorized to activate projector marriage.

The projector must not be in standby mode when activating marriage as the IMB is not powered.

- 1. Connect the projector to AC power and turn it on.
- 2. Login to the touch panel controller (TPC).
- 3. On the TPC, tap Menu > Administrator Setup > Content Devices Configuration.
- 4. In the IMB Installed list, select GDC.
- 5. Reboot the projector.
- 6. To verify that the IMB has been installed correctly, In the Operational Status region of the Main panel, verify that the IMB Status icon is green.
 - If the icon is red, an error exists or the IMB has not been installed correctly. Use the dissasembly and installation procedures to check the IMB installation.
- 7. Log on to the projector with marriage permissions.
- 8. Tap Menu > Service Setup > IMB Marriage.
- 9. Complete the Marriage wizard.
- 10. Tap Finish.



Technical support

Technical support for Christie products is available at:

- North and South America: +1-800-221-8025 or Support.Americas@christiedigital.com
- Europe, Middle East, and Africa: +44 (0) 1189 778111 or Support.EMEA@christiedigital.com
- Asia Pacific: +65 6877-8737 or Support.APAC@christiedigital.com
- Christie Managed Services: +1-800-550-3061 or NOC@christiedigital.com