
Technical Bulletin

Maintaining a GDC SR-1000 IMB battery

This bulletin provides information to help customers maintain their battery when operating a GDC SR-1000 IMB purchased from Christie.

The GDC SR-1000 IMB differs from the standard Christie IMB-S2 and IMB-S3 as it cannot be charged. Instead it has a higher battery life (approximately 4.5 years); therefore, to keep a GDC SR-1000 IMB in operation for over 4.5 years, the battery must be replaced.

If you have a GDC SR-1000 IMB that has a dead battery, the DCI keys are erased and the only way to repair the faulty device is to send it back to Christie for repairs.

The following instructions identify how you can identify a low battery and how to replace it.

Affected products

The following products are affected.

- GDC SR-1000 IMB

Required tools and components

The following tools and components are required.

- Replacement battery (P/N: 003-007491-XX)—Two are required.
- Battery replacement tools (PN: 003-007492-XX)
- Wooden or plastic prying tool—Do not use metal tools.
- Permanent marker
- Multimeter

Battery replacement guidelines

Review the following guidelines before replacing the GDC SR-1000 IMB batteries.

- Each GDC SR-1000 IMB has two batteries. Christie strongly recommends always purchasing two batteries.
- One functional battery must be installed in the GDC SR-1000 IMB at all times. Therefore, batteries must be replaced one at a time. If you remove both batteries, the secure information on the GDC SR-1000 IMB is destroyed and is unusable.
- The life of the GDC SR-1000 IMB batteries when installed in a projector under normal operational conditions is 4.5 years from the manufacturing date of the GDC SR-1000 IMB or from the last replacement date of the batteries.
- If an GDC SR-1000 IMB is not installed in a projector for over a period of 4.5 years from the date of manufacturing and the battery has not been replaced, a risk of a GDC SR-1000 IMB failure due to low battery voltage exists.

- Battery life is dependent on environmental conditions and the storage life is calculated assuming climate-controlled storage conditions. Christie does not recommend keeping the GDC SR-1000 IMB outside of the projector for long periods of time.

Identifying a low battery on the GDC SR-1000 IMB

Christie recommends installing the latest software package on your GDC SR-1000 IMB as the error or warning messages may only appear on the newer versions of GDC SR-1000 IMB software.

1. Power on the GDC SR-1000 IMB.
2. If a GDC SR-1000 IMB battery warning appears, immediately order replacement batteries and replacement tools, if required.



If you do not immediately order replacement batteries, you risk having a dead battery. If the battery is dead, you must ship the GDC SR-1000 IMB to Christie for repair.

Replacing the batteries

Follow these steps to replace the batteries.



Notice. If not avoided, the following could result in property damage.

- **STATIC DISCHARGE HAZARD!** Always use an ESD dissipative mat and wear an anti-static wristband and anti-static gloves when handling the product to avoid static discharge which can affect the circuitry of boards.



- Do not power up the GDC SR-1000 IMB during the battery replacement procedure.
- Do not measure the battery voltages physically on the GDC SR-1000 IMB.
- One functional battery must be installed in the GDC SR-1000 IMB at all times.
- The CA-00 must be connected to the GDC SR-1000 IMB and BRT-00 during the entire battery replacement process.

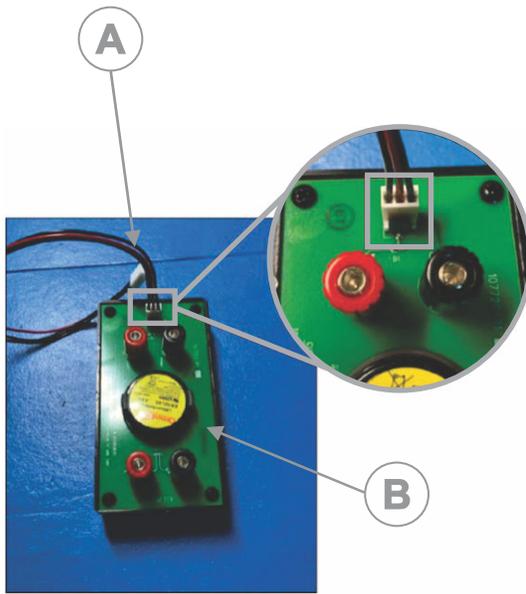
1. Make sure you have the *required tools and components* (on page 1).
2. Validate the voltage on the two new batteries.

You must validate the voltage because if you replace the batteries in the GDC SR-1000 IMB with dead batteries, the GDC SR-1000 IMB is unusable.

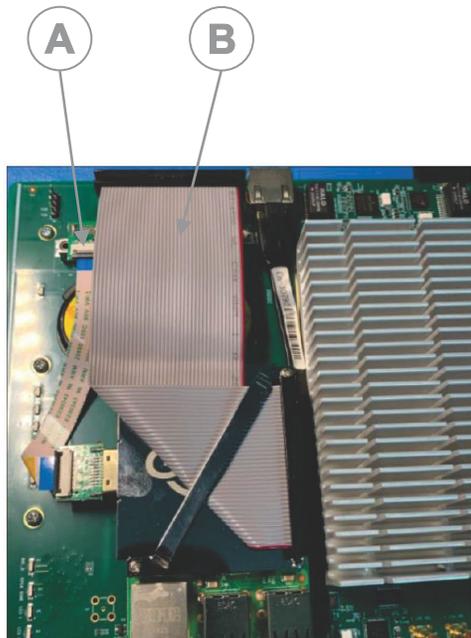
- a) Insert the new battery in the BRT-00.
- b) Place the leads of the multimeter between the V and GND terminals of the BRT-00.
- c) Make sure the battery voltage measures greater than 3.65 V before proceeding.
If the battery voltage is less, do not use this battery.
- d) Repeat steps a to c for the second battery.

3. Connect one end of the CA-00 (A in the image below) to the three-pin header of the BRT-00 (B in the image below).

Make sure no other cables are connected to the BRT00.



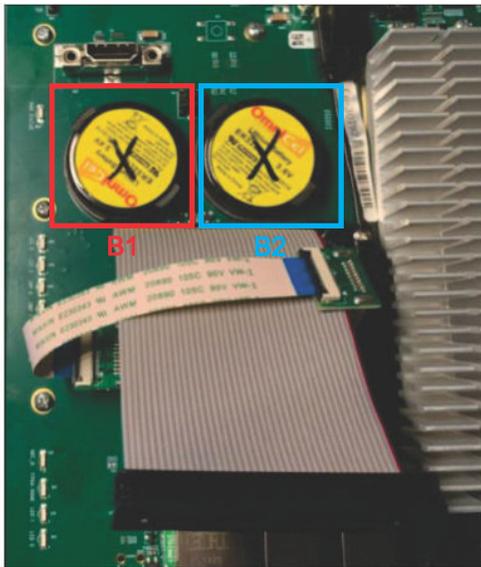
4. Remove the GDC SR-1000 IMB from the projector and place it on a flat surface. Christie recommends holding the GDC SR-1000 IMB with both hands and placing it on an anti-static bag.
5. Disconnect the HDMI (A in the image below) and GPIO (B in the image below) ribbon cables without damaging the pins beneath and place them away from the batteries.



6. Use the permanent marker to mark both batteries on the GDC SR-1000 IMB with an X to identify these are the old ones.
7. Connect the other end of the CA-00 harness to the three-pin header of the GDC SR-1000 IMB.



8. Replace the battery at the B1 location (shown in the image below).



- a) Remove the battery at location B1 from the battery holder by separating it with the prying tool.
The prying tool must be plastic or wooden. Do not use a metallic tool or metallic object when removing the battery.
- b) Discard the old battery.
- c) Insert a new battery at the B1 location.
- d) Align the pins properly on the battery holder and make sure to not bend the leads under the battery.
Make sure the new battery installation results in the battery being flush with the holder and both retention tabs being fully engaged.
9. Replace the battery at the B2 location (shown in the image in step 8).
 - a) Remove the battery at location B2 from the battery holder by separating it with the prying tool.
The prying tool must be plastic or wooden. Do not use a metallic tool or metallic object when removing the battery.

- b) Discard the old battery.
 - c) Insert a new battery at the B2 location.
 - d) Align the pins properly on the battery holder and make sure not to bend the leads under the battery.
10. Disconnect CA-00 from the three-pin header of the GDC SR-1000 IMB by pulling the CA-00 housing.
Do not pull the cables. Use the housing to properly disconnect the CA-00.
 11. Re-connect the HDMI and GPIO cables disconnected in step 5.
 12. Update the date code sticker on the AES/GPIO connector block with the date of battery replacement.
 13. Re-install the GDC SR-1000 IMB in the projector.

Verifying the batteries replacement

The following instructions assume the latest software package is installed on the GDC SR-1000 IMB.

1. Power on the projector.
2. Navigate to the GDC SR-1000 IMB web user interface.
3. Hover over the Battery icon on the bottom-right corner of the screen.
 - If the Battery icon is green and the voltage is identified for both batteries, the replacement was successful.
 - If not, contact Christie Technical Support.

Technical support

Technical support for Christie Cinema products is available at:

- Support.cinema@christiedigital.com
- +1-877-334-4267
- Christie Professional Services: +1-800-550-3061 or NOC@christiedigital.com