

How To Upgrade The Brennan BB1 SD Card

Martin Brennan - 24th October 2019

The front panel is designed so it can be detached and many owners have managed without any instruction from us. But it is tricky and you could damage or spoil the bb1 in the process. Your guarantee does not cover damage you do.

In the instructions that follow I suggest using a credit card because it is less likely that you damage the wood. If you use a screwdriver or metal lever you will almost certainly damage the wood. Be careful not to scratch the display.

Software - prepare the new micro SD card

You need to prepare your new (larger) micro SD card. This involves

Format the SD card and copy the operating system and bb1 application files.
Optionally copy the music and video from the old SD card.

You will need a new micro SD card and USB card reader. BB1 has been tested with micro SD cards up to 400Gb.

- 1) With the power off. Plug your new micro SD card into a USB Card reader and plug that into the USB port.
- 2) Turn on and select Settings->Maintenance->Advanced->Copy SD OS (and delete P3). This will take about three minutes. (The latest software will reboot at this stage - some older software may not - in which case you should turn off and on)
- 3) Select Settings->Maintenance->Advanced->Create P3 - 10 seconds upwards depends - on size of new card - FYI its formatting partition 3 (P3)
- 4) The micro SD card is ready for use but contains no music at this stage. This step is only required to copy the music and videos from the internal SD card to the new card. If you want an empty bb1 you don't need this step.
Settings->Maintenance->Advanced->Copy P3. This could take a long time - it depends on how much music is on the original and on the speed of the SD cards. On my system 7.5G took 12 minutes to copy.

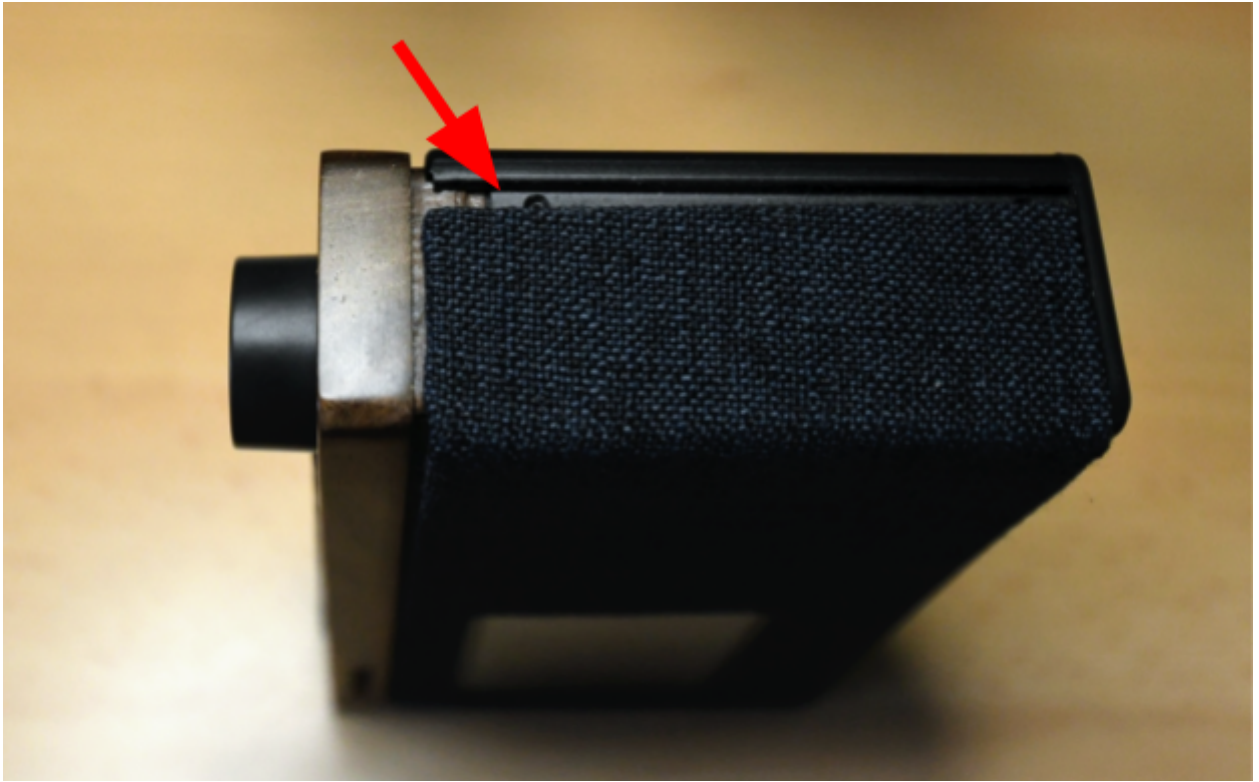
Hardware - open the bb1

Step 1 - Turn off the BB1. Remove the power lead and batteries.

Step 2 - slide the right side of the fabric cover forward.

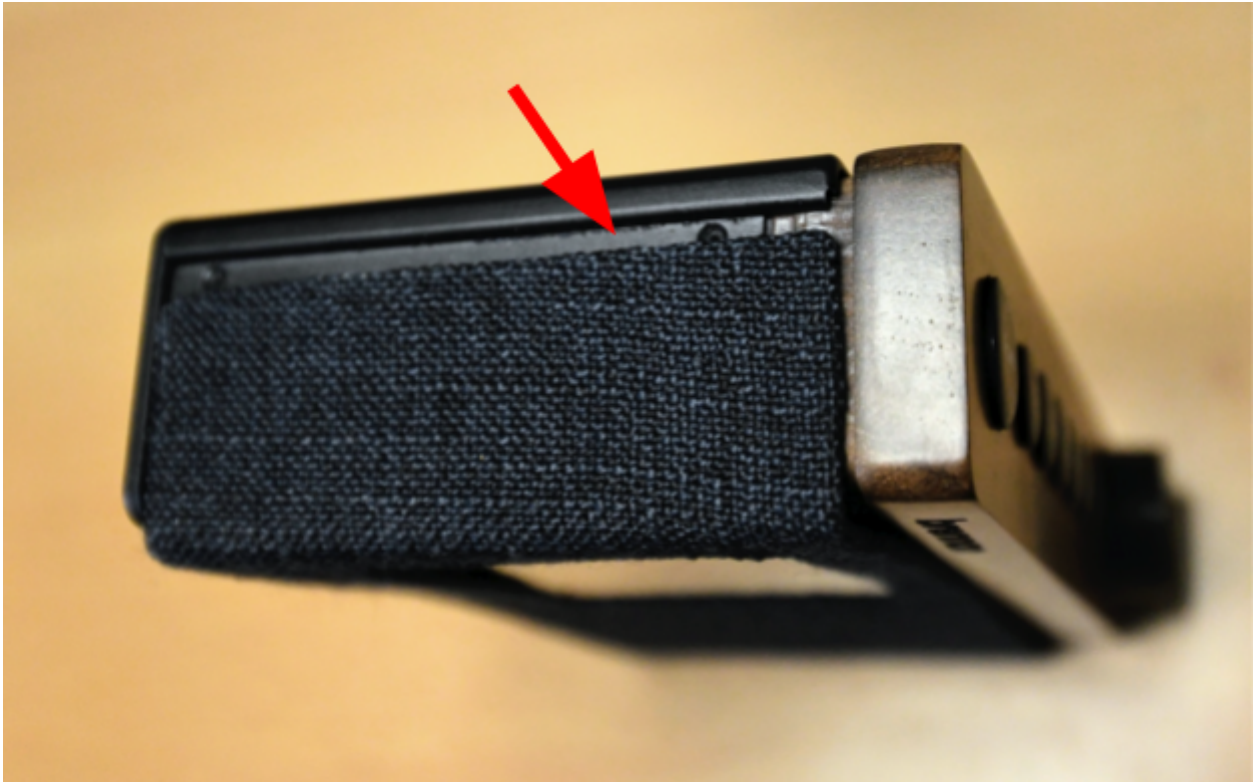
Unless you have fingernails like Wolverine then I suggest you get this started by running a credit card into the groove between the fabric and metal back. Remember you are

attempting to slide it forward not lift it away from the body. Its enough to slide it forward 5mm at this stage.



Step 3 - slide the left side of the fabric cover forward.

Repeat the process on the other side.



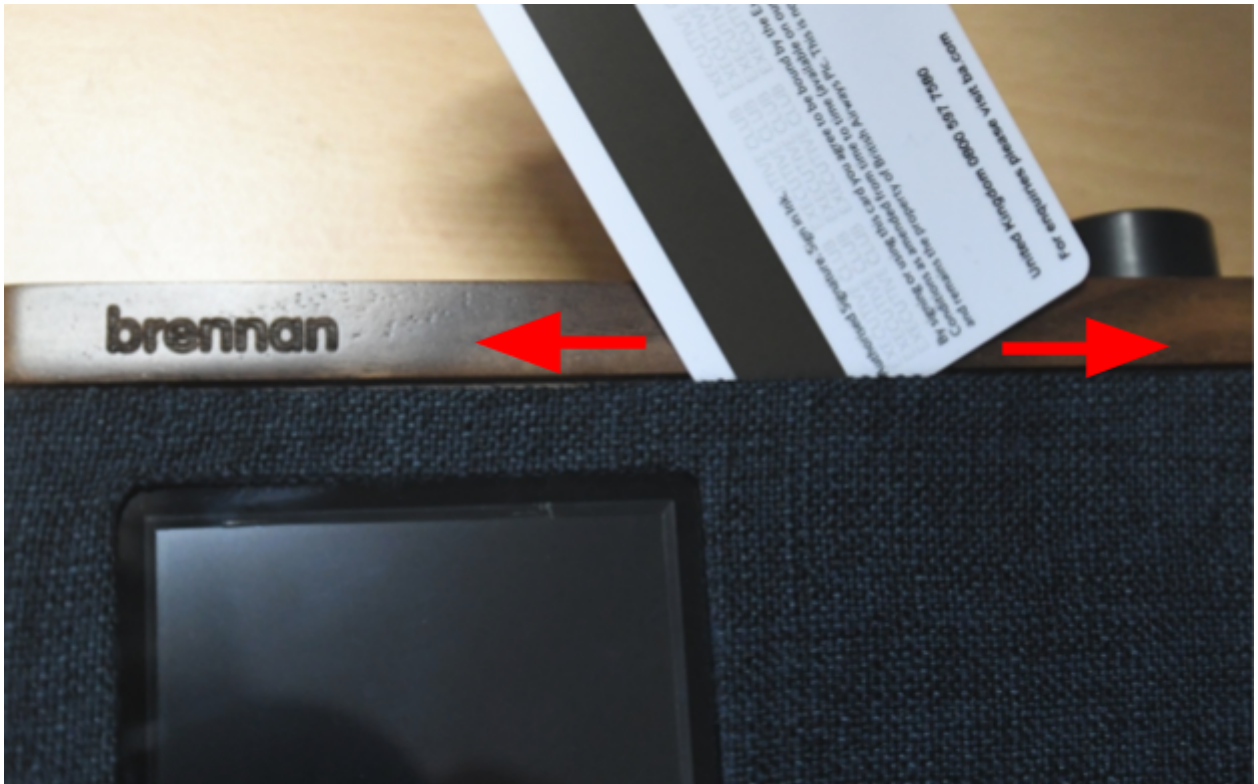
Step 4 - prise away the bottom edge .

The fabric cover is held in place by some locating pillars dotted around and clips near the display. You need to loosen these by running the credit card along the bottom edge. You should insert about 5-8mm and slide it along. You will feel the clips release when you get it right.



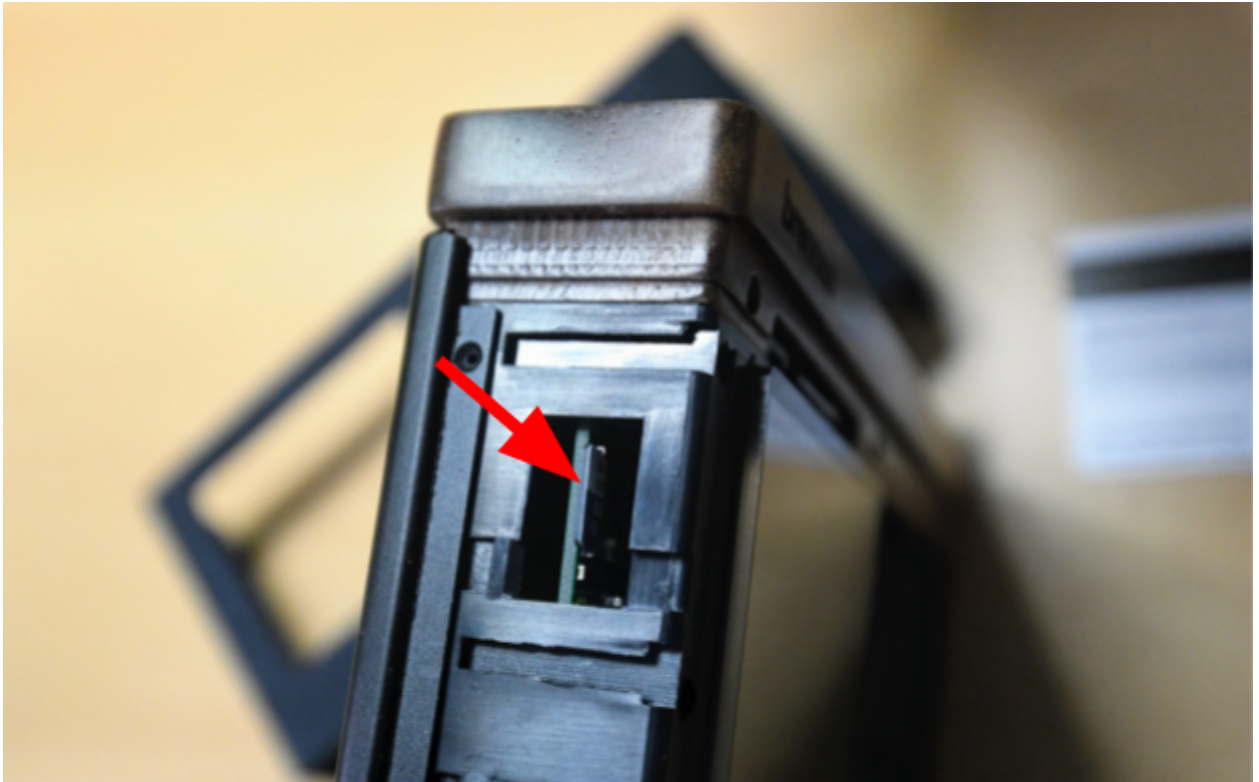
Step 5 - prise away the top edge .

The top edge is a repeat of the bottom edge - but the last clip at the top right of the display is always a bit reluctant. Take your time. If necessary run the credit card around the bottom and top again and approach the last clip from the other side.



Step 6 - slide the cover off the body and replace SD.

When all the clips have been unclipped the cover will slide off the body. Notice that the cover fits in grooves at the sides. You can now see the micro SD card in the Raspberry Pi at the left side of the bb1.



If your fingers are not too big you may be able to change the card with your fingers - that's the best way. I'm borderline and sometimes if I'm tired I use a pair of fine pliers or tweezers.

Don't extract the SD card with the bb1 in the position shown above - that was just for photography - lie the bb1 on its back. The reason is that if you drop the sd card into the cavity it may be difficult to retrieve.

Step 7 - reverse the process

It's not a bad idea to apply power at this stage and check that the new SD card works and has been fitted OK by turning on. Turn it off now and remove power before reassembly.

Putting the cover back on takes a few seconds. Remember to locate the sides in their grooves and it will slide back smoothly. Push the cover gently around the edges and around the display and between the speakers to engage all the clips and pillars.

You may want to tidy any stray fabric around the display I suggest you tuck any threads into the groove using a wooden cocktail stick - again no metal near the display or you will scratch it.