

This article outlines meaning and troubleshooting steps of the various Error Codes that appear on the alpha-numeric display on the front of the BDP. There are a total of four error codes that can appear on the BDP's display and are generated by a microprocessor that is independent from the BDP's main processor board. The main processor runs the Linux OS that plays music and handles other various tasks.

BDP 1 0000008	ERROR 03
R02.3 2011-11-21	019

**Error 03** will be displayed if the microprocessor doesn't detect voltage on the BDP's built-in analog Power Supply Unit (PSU). This usually occurs either due to a blown fuse (F1), so check the fuse for continuity or if the toroidal power transformer (part of the power BDP's built-in power supply) is unplugged. The toroidal transformer makes use of a four pin connection on the primary side and a two pin connector on the secondary side.

**N.B.** Before attempting to remove the fuse to check for continuity, either visually or using a meter, turn off the unit and remove all cables from it, especially the power cord.

BDP 1 0000008	ERROR 04
R02.3 2011-11-21	080

**Error 04** will be displayed if the microprocessor detects that the voltage has sagged too low for the linear supply to generate the needed 12 volts for the BDP's main board. This message will also appear during brown outs. It is not uncommon to return home on hot summer days to find this message here in Canada. Simply put during the summer our power grid suffers from brown outs with all the central AC units running all day long. A brown out usually lasts for only a fraction of second, but this is all it takes to trip the microprocessor. A multi-meter generally won't show these brown outs or dips in AC power because they are too brief to be captured by general purpose meters. To catch a brown out you would need something that can take reading quickly and record it much like a digital storage oscilloscope. The BDP's minimum line voltage for 120V and 240V units are 100V and 190V respectively.

BDP 1 0000008	ERROR 05
R02.3 2011-11-21	233

**Error 05** will be displayed if the microprocessor detects that voltage is too high for the linear power supply to handle, as if the linear regulator has an upper limit as to what it can dissipate before it overheats and damages itself. Again it is not overly uncommon for power spikes to occur once in a while. Also, different regions have varying levels of power line regulation. Power spikes generally behave much like brown outs so they also can't be caught with something as simple as a multi-meter. The maximum input voltage that the BDP will accept before triggering this error code for 120V and 240V units are 128V and 254V respectively. The central AC units running all day long. A brown out usually lasts for only a fraction of second, but this is all it takes to trip the microprocessor. A multi-meter generally won't show these brown outs or dips in AC power because they are too brief to be captured by general purpose meters. To catch a brown out you would need something that can take reading quickly and record it much like a digital storage oscilloscope. The BDP's minimum line voltage for 120V and 240V units are 100V and 190V respectively.

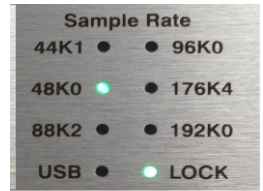
BDP 1 0000008	ERROR 09
R02.3 2011-11-21	184

**Error 9** is the only error message to not be triggered by power line conditions. This message occurs if the microprocessor doesn't hear from the main board running the Linux OS. The way this operates, when the system is working as it should, is that the user triggers the BDP to turn on (using the power button, BR-2 remote or 12v triggers) and this tells the microprocessor to turn on the linear 12 volt power supply. This, in turn, causes the main board to start the Linux OS. When the Linux OS is up and running it sends its firmware revision to the microprocessor to be displayed on the BDP's display. If the firmware revision is not received by the microprocessor within two minutes of applying power, then the microprocessor cuts power and displays the above message. When this occurs there are a handful of things that you can check.

## BDP ERROR CODES continued

### **Error 9 continued:**

Before taking anything apart check to see if your DAC receives lock at any point before the message appears, if the DAC is receiving lock it will stop when the error code appears.



If the DAC does receive lock at any point during initialization then the Linux OS is starting up and loading drivers, this tells us the most likely culprit is a loose serial cable. You should check to make sure that the serial cable that connects the main-board to the microprocessor is connected and there aren't any loose wires.

The picture above shows the BDP-2's serial cable (top) and the BDP-1's serial cable (bottom). You should identify and follow this cable to both ends are connected.

If the DAC is not receiving lock then the problem is likely that the Linux OS isn't booting which could be caused by a drive (simply unplug any drives and try turning on the unit) or and more likely a faulty CF card, if you feel technically inclined follow the steps linked below to re-flash the CF card.

<https://dl.dropboxusercontent.com/u/86196657/DOCS/BDP%20image%20Mac%20OS%20X.pdf>

<https://dl.dropboxusercontent.com/u/86196657/DOCS/BDP%20image%20Windows.pdf>

Otherwise we can send you a replacement CF card in the mail.

