

Service Note		
Product	Description:	Service note no.
BMC-2	Audible tone in the noisefloor	SNo-T0111

Reason for note:

It has been reported from customers that when feeding the BMC-2 with a 44.1 kHz blank signal on any input, a tone (3-4 kHz) is audible in the right analog monitor output.

We have investigated the problem and found that when an external digital source delivers a 44.1 kHz signal to the BMC-2 and the sample rate is 20-50 ppm higher than the nominal 44.1 kHz we have some beating effects in the AD converter that results in a 3-4 kHz tone audible in the noisefloor (at approx. -100dB) in the right channel. The tone is also present in the left channel but lower and therefore "hidden" in the noisefloor.

We have found a solution that reduces the tone by approx. 12 dB. This is done by changing a parameter in the JETPLL inside DICE JR. There are no HW changes.

A new firmware version (1.06) has been prepared with the fix and must be used in all future productions of BMC-2.

Units returned for service should only be updated if the described "error" has been reported as the problem.

Actions:

Load software version 1.06 (or newer)

Please refer to "BMC-2 - Firmware update procedure" and perhaps "BMC-2 – Boxbuild procedure" for help. These procedures can be found on the Techserver

IMPORTANT:

This replacement should only be carried out by skilled technicians.