Hello Eddie,

I’m out today, and will be out next week. For the acoustic test station, would it be possible for you to modify the limits? I know you are swamped, if this is not possible let me know.

Instead of a single pass/fail for each of the three distortion masks: 1.) Norm THD, 2.) Norm Rub and Buzz, and 3.) Perceptual Rub and Buzz

Can you separate the masks into 4 bands each?

Then the fault and rework codes will correspond to these failures:

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| **Frequency Band** | **Potential Fault (may be other causes)** | **Re-work** |
| 20-200 | Bad Speaker, Bad Speaker to Headstrap connection, Bad Headstrap Construction | Replace speaker, replace headstrap |
| 201-800 | Bad Headstrap Construction | Replace headstrap, (maybe add foam to rework headstraps) |
| 801-6,000 | Bad speaker metal grill (especially at 1-2kHz) | IGNORE FOR EV2 - needs new material (design) |
| 6,001-10,000 | Unknown, maybe noise floor too high | If noise floor too high, check clay at back of box to make sure well sealed. (Especially at 10kHz) |

The 20-200 band and 201-800 band limit masks may need to go up slightly for EV2.

I audibly screens some units for best EV2 can do levels of distortion and maybe we can use these to set that threshold. They were used for lens rework. It is possible they broke on rework, but if we get statistics on these we can set  limit for EV2.

Pass units in the 801-6,000 Hz band. This may release some bad units that have non-grill failures, but I think it is an acceptable risk for a EV2 level system.

Other issues may be PCB components, HMD cables (need to wrap in foam the metal cable on top of PCB, or other parts), connection from headstrap to the HMD (i.e. pogo pins, loose screws,  poor connection, etc.), or breakage/defect

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| **To Do:** |  |
| Fix IQC headstrap station to properly screen issues | |
| Screen headstraps for "good" units | |
| On failed systems, replace the headstrap (If 20-200Hz, replacing the speaker makes more sense, if there was stock in-house.) | |
| Re-test | |
| If still fails, set aside HMD as potential other issue. | |

Regards,

Joy