F1 Model 812 Flexible Array loudspeaker and F1 Subwoofer

Troubleshooting Tips

Description

Refer to the F1 Model 812 Flexible Array Loudspeaker and F1 Subwoofer service manual, reference number 731419-SM, located on the Professional Products page of the Bose Service web site at http://serviceops.bose.com for any information not presented in this document.

1. Preventative Repair Measures

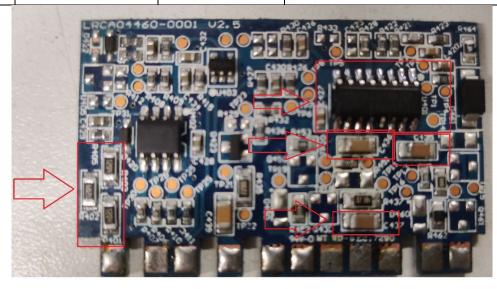
Note: Perform the following on all units returned for repair.

Product	Check	Action
F1 Subwoofer	Firmware revision	Update to the latest version. Go to the F1 Model 812
		and F1 Subwoofer product page, located on the
		Professional Products page of the Bose Service web
		sites listed above.

2. Troubleshooting

Product	Symptom	Check	Action
F1 Subwoofer	Bad / acrid odor coming from product when driven hard.	Firmware revision	Update firmware on all F1 Subwoofer units built before 2/19/16 (DOM 6050) that come into Repair or Reman to the latest revision. This issue was corrected by revision 1.04. Go to the F1 Model 812 and F1 Subwoofer product page, located on the Professional Products page of the Bose Service web sites listed above to download the latest firmware.
F1 Model 812	Bottom array section will not lock into "J" position.	Array magnet and array cable foam.	Check array magnet on the enclosure for damage. If okay. Shine a flashlight in between the array plastic and the woofer baffle to see if the foam used on the array cable is preventing the magnet from latching securely. If it is, trim some of it off to allow it to latch.
F1 Model 812	Input 1 XLR input not working. No audio or distorted audio.	R13 on the I/O- DSP PCB.	If the input level is too high, it can damage R13, resulting in no audio or distorted audio.
F1 Model 812	Buzzing during audio playback	Array grilles and array covers.	Check these parts to ensure that the foam pieces / strips used to control buzz are in place. If they are not, replace the part.
F1 Model 812	No Audio	-52 V on SMPS PCB	If voltage is incorrect, check C9 and replace if failed.
F1 Model 812		If HV_390V and ± 18V are present but ±5 V and ±64V are not	If 15V_SMPS is lower than 15 volt (12Volt or lower) replace following components on PCBA2/J302. U401 - L6599AD

present, Check 15V_ SMPS. C437,C436,C435 - 10μF/25V R401,R402,R403 - 1.2MΩ



PCBA2

F1 Model 812 and SUB	Low Audio, one channel	Check the resistors Replace if found defective. and diodes on the inputs.
		For The F1 sub: R2/R7, D15/D16 for channel 1.
		R10/R16, D21/D22 for channel 2.
		F1 812:
		R13/R23, D17/D18.