

Service bulletin # H/K2001-03 June 2001

Warranty labor rate: MAJOR repair

To: All harman/kardon Service Centers

Models: AVR110/210/310/510 (2000/3000/4000/5000)

Subject: No Output In Surround Mode

In the event you receive an AVR110,210,310, or 510 A/V receiver with the complaint: "The receiver has no output when any surround mode is chosen, when using any input, digital or analog.", check the item below for a possible solution:

Probable Cause: Defective IC4 EEPROM on the DSP board.

Solution: Replace IC4 (called IC04 in the parts list) following these instructions:

- 1) Remove the top cover, (14) Black Phillips screws at the sides and rear of the unit.
- 2) Locate the DSP PC Board; Figure 1. Remove the metal brace at the top of the unit.
- 3) Pull the white 21 conductor ribbon cable at the rear of the DSP PC Board straight out of its receptacle.
- 4) Unplug the multicolor 5 conductor molex cable at the top of the DSP PC Board.
- 5) Remove the (33) black Phillips screws on the left side of the rear backplate; see Figure 2. Do not remove any additional screws on the right side. Remove all three black plastic plugs that cover the optical inputs at the rear of the DSP PC Board.
- 6) Pull on the left side of the rear backplate, away from the receiver chassis; you should be able to pull it away enough to allow the DSP PC Board to be pulled straight up and out of the receiver. If necessary, cut any additional cable ties that would prevent removal of the DSP board.
- 7) Replace IC4 (called IC04 in the parts list), with h/k part# J2131328001X. Caution: IC4 is an electrostatically sensitive device and can be damaged by careless handling; you must follow proper static control procedures to prevent damage to the IC.
- 8) Replace DSP PC Board and follow the above procedures in reverse order. Screws: If using a power tool, use care and minimum effort to avoid damaging the various plastic receptacles.
- 9) Test unit to assure original problem has been corrected.

FIGURE 1

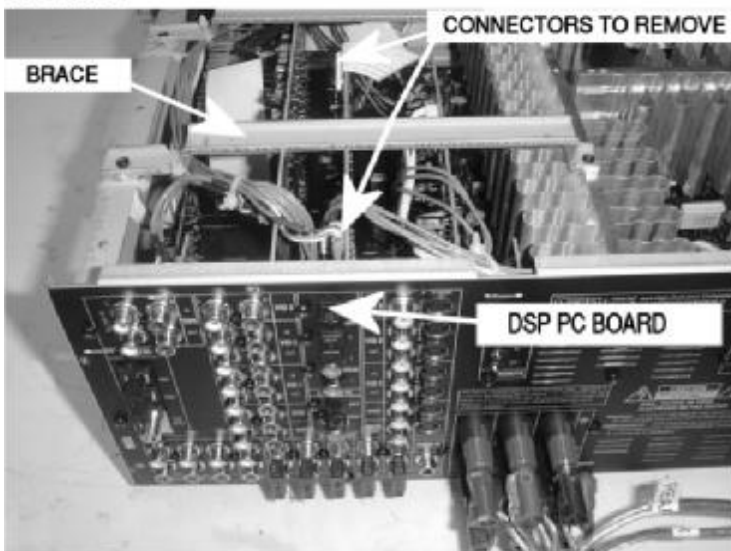


FIGURE 2

REMOVE ALL PHILLIPS SCREWS ON THIS SIDE OF THE RECEIVER

