harman/kardon

Service Bulletin

Service bulletin # HK2000-01 Rev1 April 2001

Warranty labor rate: MINOR repair

To: All harman/kardon Service Centers

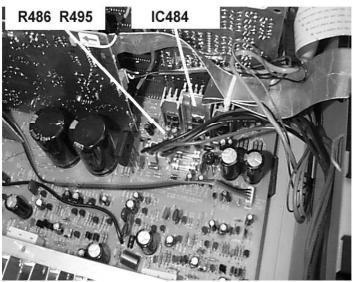
Models: AVR35/AVR45/AVR65

Subject: No Output in Surround Modes

In early versions of the AVR35, AVR45 and AVR65, the IC484 +5v regulator may overheat and go into thermal protection. Its +5 volt output will cease; when this happens the AC-3 and Surround Processor cannot function normally, and the audio output may go dead, or experience a long delay before any surround mode comes on.

In the event you receive an AVR35, AVR45 or AVR65 A/V receiver with the complaint "when attempting to use the surround modes, the unit's output goes dead after several minutes, or may not change from stereo into the surround modes until after a long delay, or not change at all" (the words 'No Data' may also appear in the display), perform the following modification:

- 1) Remove the top cover, (14) Philips screws; set the unit on its side and remove the bottom cover, (8) Philips screws.
- 2) Locate R486, R495 (10 ohm 1 watt resistors) and IC484 (+5v regulator) on the MAIN PCB. See Figure 1. The parts are located near the front right corner of the MAIN PCB when viewed from the front. IC484 is attached to a rectangular aluminum heatsink.
- 3) Desolder and remove R486, R495 and IC484. The IC484's heatsink has two additional soldered connections at the bottom of the MAIN PCB. See Figure 2.
- Replace R486 and R495 with (2) 15 ohm 3 watt resistors, (h/k part# J1771150771X), soldered in series to measure 30 ohms each. See Figure 3. Replace IC484 with +5v regulator, J1217780002X).
- 5) Replace heatsink with new larger part, (h/k part# J5241003040XX)
- 6) Use silicon grease when attaching the new regulator to the heatsink, and tighten it sufficiently with its single mounting screw before re-soldering in place.
- 7) When all new parts are installed, replace both the top & bottom cover.
- 8) Test the unit by connecting a music source to a digital input, either optical or coaxial, powering it up and monitor the receiver playing normally for extended period of time.



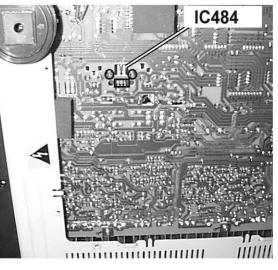
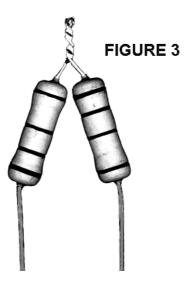


FIGURE 1

FIGURE 2

Models: AVR35/AVR45/AVR65 Subject: No Output in Digital Playback Mode



Model	Serial number 120V	Serial number 230V RDS	Status	Action
AVR35	JS0007-01000 to JS0007-14748	JS0005-01000 to JS0005-05956	IC484 Overheating;	Replace R486 and R495 with (2) 15 ohm 3 watt resistors, soldered in series to
AVR45	JS0001-01000 to JS0001-11139	JS0004-01000 to JS0004-04434	Unit's output ceases and "No data" appears in the display when using digital inputs	equal 30 ohms. Replace IC484 +5v regulator.
AVR65	JS0003-01000 to JS0003-02319	Modified by factory		Replace IC484 Heatsink
AVR35	JS0007-14749 Or higher	JS0005-05957 Or higher	Madified by factory	
AVR45 AVR65	JS0001-11140 Or higher JS0003-02320 Or higher	JS0004-04435 Or higher Modified by factory	Modified by factory	NONE REQUIRED