

# ADCOM GFA-555II Power Amplifier

## Audio Upgrade Modification

### Driver Board:

C101 (C151) = 1.0uF/250V Panasonic ECW-F2105JA polypropylene film  
C104 (C154) = 4.7uF/50V Elna ROA Cerafine electrolytic or WIMA MKS2B044701K00J00 polyester film (HF bypass)  
C106 (C156) = 33pF/500V CDE CD15ED330GO3F mica  
C109 (C159) = 470uF/25V Panasonic FC electrolytic

R103 (R153) = 1k, 1/4W, 1% PRP PR9372 metal film  
R123 (R173) = 22.1k, 1/2W, 1% Holco H4 metal film (feedback)

\*\*\* Check fusible R104 (R154) = 100Ω \*\*\*

Thermally bond together Q101 & Q102 (LCH) and Q151 & Q152 (RCH).

Install bypassing with (4) 47uF/100V Nichicon Muse KZ electrolytic (back corners of board) and (4) .1uF/100V WIMA MKP4D031002D00KSSD polypropylene film (underside of board) from V+ (**11 & 13**), V- (**12 & 14**) to board ground (**15**).

Install heat sinks (Aavid Thermalloy 577002B00000G) on Q105 (Q155), Q107 (Q157), Q108 (Q158) with 4-40 x 1/4" machine screws and 4-40 kept nuts (2403-A).

**Wiring:** **5** = yellow (LOS); **6** = blue (LOS); **7** = white (ROS); **8** = brown (ROS); **9** = yellow (L feedback); **10** = white (R feedback); **11** = red (L V+); **12** = orange (L V-); **13** = red (R V+); **14** = orange (R V-); **15** = black to main power supply capacitor bus ground; **16** = yellow (L distortion LED); **17** = black; **18** = orange (R distortion LED); **19** = black; **20** = red (thermal LED); **21** = black; **22 & 23** = thermostat (L); **24 & 25** = thermostat (R).

IC101 (IC151) = LT1006 (AD820)

**Output Stage:** Add #8 internal lock washers (1380-D). LOS = yellow; ROS = white

C202, C252, C302, C352 = 47uF/100V Panasonic FC electrolytic

### Power Supply:

C802~C805 = 18,000uF/100V United Chemi-Con 36DA183F100CC2A (65X108mm).  
Use 10-32 x 3/8" machine screws (H90290) with #10 internal lock washers (1381-E).

C806, C807, C808, C809 = .1uF/100V WIMA MKP4D031002D00KSSD polypropylene film  
D801, D802 = Diotec FDB3506P/T-S soft recovery bridge rectifier. Use #8 internal lock washers (1380-D).  
R801~R804 = 3.9k, 2W, 5% Yageo metal oxide (move to top side of pc board).  
Move R805 for power on LED indicator to top side of pc board.

Install .1uF/850V Roederstein MKP1839HQ across AC side of D801, D802 bridge rectifiers using multi-stack or piggyback crimp connector (*optional*). Install .1uF/275V Evox Rifa PHE840 Class X2 EMI suppression capacitor across AC power input (*optional*).

**IEC Socket:** Qualtek 703W-00/06. Use 4-40 x 3/8" black hex (1/16") screws (43581-B) and 4-40 kept nuts (2403-A).

AC hot to 1<sup>st</sup> position (red) on transformer primary voltage selection bar.  
AC neutral to 3<sup>rd</sup> position (white & blue) on transformer primary voltage selection bar.

**Alignment:** R119, R169 (bias) = ~10mV DC across TP201 to TP301 / TP251 to TP351 *with top cover on*.