



HARRIS

SERVICE BULLETIN

MAINTENANCE AND MODIFICATION DATA

BROADCAST DIVISION

BULLETIN NO: AM-466-TLH

DATE: August 1996

Updated: Feb 2004

EQUIPMENT: AMS-G1 Stereo Generator

SUBJECT: Pilot Crystal Circuit

We have determined that the signal level within the Y1 pilot crystal circuit may be too high, leading to failure of the crystal and complete loss of the 25 Hz pilot.

This bulletin addresses this concern with changes to reduce the signal level applied to the crystal.

*Note: This is independent of the Pilot Level adjustment.
Adjustments to pilot level will not resolve this problem.*

Please make these changes as soon as conveniently possible.

Tools Required: 30W pencil soldering iron, de-soldering tool, wire cutters, Needlenose pliers, Screwdriver

Parts included at no charge:

<u>Qty</u>	<u>Part Number</u>	<u>Description</u>
1	444-2993-000	Crystal, 25.6 Khz
1	516-0453-000	Cap, 0.1 uf
1	548-2400-634	Resistor, 2.21 Meg ohm

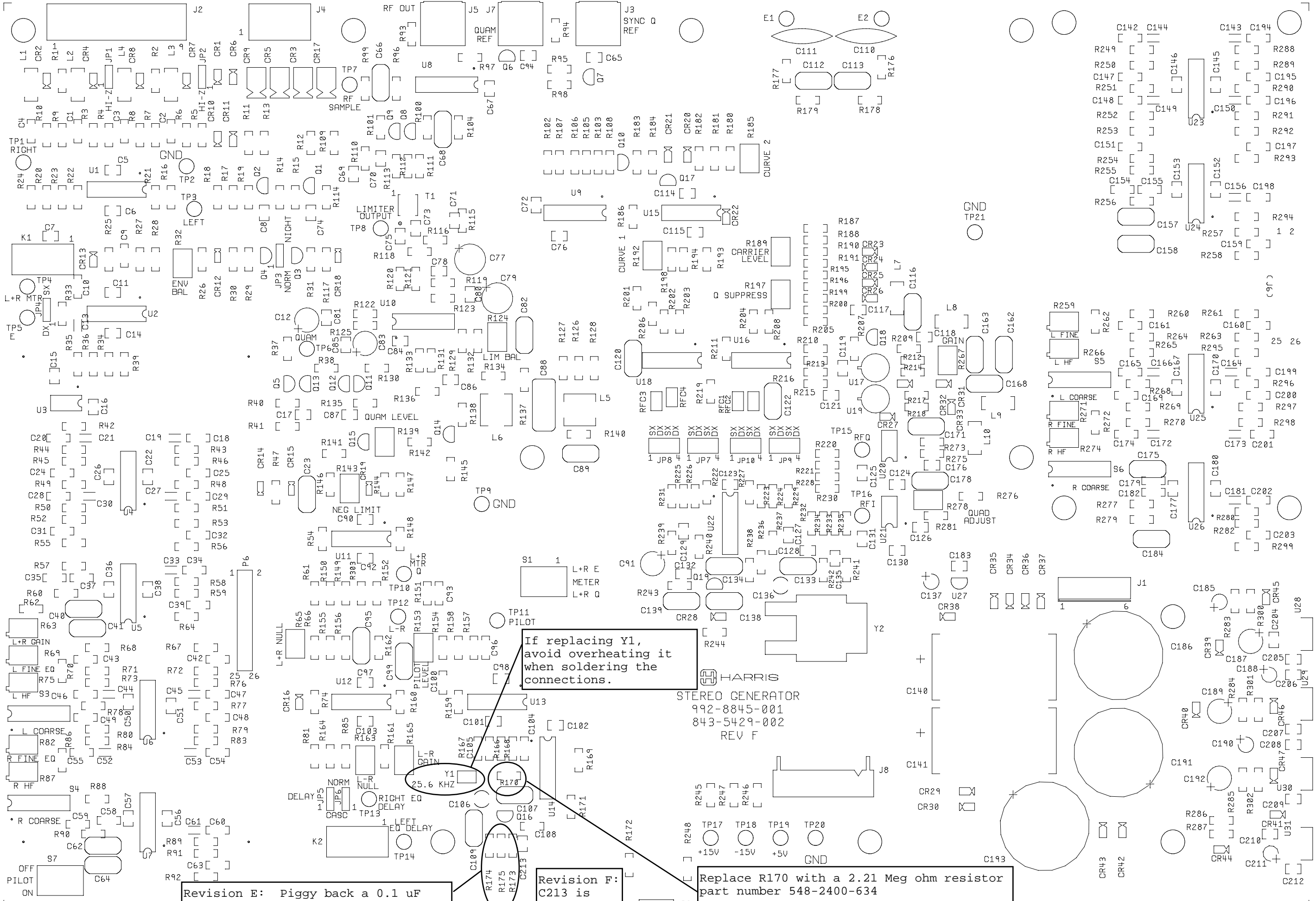
Procedure

1. Disconnect the AC power and any connections necessary to allow reasonable access to the top of the AMS-G1 Stereo Generator.
2. Remove the top cover to gain access to the Stereo Generator board. See drawing.
3. It is possible to make the changes without removing the circuit board. However, if you prefer to remove the board so that you have access to the bottom of the board, please use the following steps:
 - a. Remove the plastic safety cover from the PDM Sample connector. You will need a 5/16" nut driver for this.
 - b. Unsolder the wires from the PDM Sample connector.

- c. Remove the 6 screws which fasten the rear panel in place.
 - d. Unplug J1 and J8.
 - e. Remove the mounting screws from the board (Qty 14), and screws which fasten the aluminum heat sink in place on the right hand side (Qty 2).
 - f. Lift the board so that it clears the power transformer, and slide it out the rear of the chassis.
4. A new crystal is being provided in case yours has failed. It is otherwise not necessary to replace it. Note that if you need to replace the crystal, take care to avoid overheating it while soldering the connections.
 5. Remove the existing R170, and replace it with the enclosed 2.21 Meg ohm resistor.
 6. Add a 0.1 uf capacitor, C213, across R175.
 7. This completes the modification. Reinstall the hardware and connections removed in the preceding steps.

If you have any questions or comments concerning this bulletin, please contact:

Harris Broadcast
Radio Field Service
P.O. Box 4290
Quincy, Illinois, USA 62305
217/221-7528
Fax: 217/221-7086
Telex: 650-374-2978 Haris UR



If replacing Y1, avoid overheating it when soldering the connections.

HARRIS
STEREO GENERATOR
992-8845-001
843-5429-002
REV F

Revision E: Piggy back a 0.1 uF capacitor C213 516-0453-000 across R175.

Revision F: C213 is standard.

Replace R170 with a 2.21 Meg ohm resistor part number 548-2400-634

Y1
25.6 KHZ

R170

R174

R175

R173

C213

R173

(9)

25 26

U28

C212

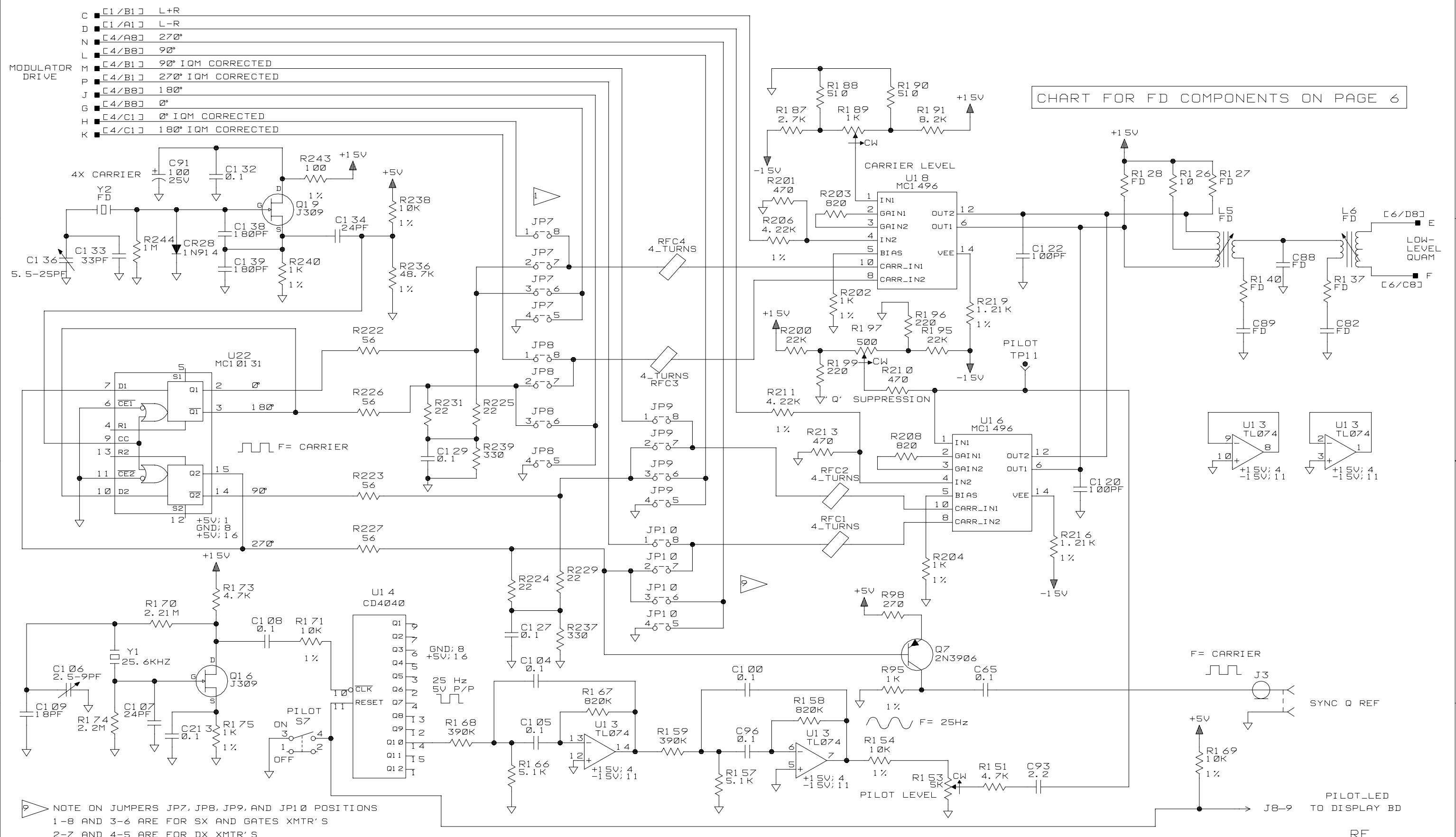


CHART FOR FD COMPONENTS ON PAGE 6

NOTE ON JUMPERS JP7, JP8, JP9, AND JP10 POSITIONS
 1-8 AND 3-6 ARE FOR SX AND GATES XMTR'S
 2-7 AND 4-5 ARE FOR DX XMTR'S

NOTES	4. INDUCTANCE IN UH.	REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM	
	3. CAPACITANCE IN UF.		G		05-14-97	DFD	.	41332	
	2. RESISTANCE IN OHMS.		ADD C213, REV R170						
	1. ALL RESISTORS ARE 1/2 WATT, 1%.		H		2-1-00	DFD	DFD	45075	

UNLESS OTHERWISE NOTED:

6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.

5. SHEET NUMBER ZONE (2/A) CONTINUATION SYMBOL

HARRIS CORPORATION								
BROADCAST SYSTEMS								
P. O. BOX 4290								
QUINCY, ILLINOIS 62305								
THIS DOCUMENT CONTAINS PROPRIETARY DATA OF HARRIS CORPORATION. NO DISCLOSURE, REPRODUCTION, OR USE OF ANY PART THEREOF MAY BE MADE EXCEPT BY WRITTEN PERMISSION.								

DRAWN BY	DWC	TITLE	SCHEM. STEREO GENERATOR	
DATE	3-25-93	DWG #	839-8138-002	REV H
ENG CHK	RLB	SHEET	5	OF 7
PROJ ENG	DWC			
MFG ENG	S. CORNWELL			