

TABLE OF CONTENTS

Paragraph		Page
1	Circuit Description	1
2	Audio Amplifier Assembly A23 Interface Connections	1
3	Maintenance	2
4	Parts List	2
5	Schematic Diagrams	2

LIST OF FIGURES

Figure		Page
1	Audio Amplifier Assembly A23 Component Location Diagram (10073-5800)	3
2	Audio Amplifier Assembly A23 Schematic Diagram (10073-5801, Rev. D)	4

LIST OF TABLES

Table		Page
1	Audio Amplifier A23 Interface	1
2	Audio Amplifier Assembly A23 Parts List (PL 10073-5800)	2

1. CIRCUIT DESCRIPTION

Audio Amplifier Assembly A23 receives audio input from the A5 assembly and outputs a minimum of 2.5 watts of audio power at maximum AF gain control settings to the receiver front panel 8 ohm speaker. The total harmonic distortion at full output is 5 percent maximum and typically it's less than 1%.

Low level audio from the A5 Assembly is applied to voltage divider network R1 and R2. U1 provides 48 dB of fixed voltage gain to provide audio output power. U1 output drives the internal 8 ohm speaker through a shielded cable to prevent interference, and is also routed to rear panel connector J7 for use in driving an external 8 ohm speaker.

2. AUDIO AMPLIFIER ASSEMBLY A23 INTERFACE CONNECTIONS

Table 1 lists the Audio Amplifier A23 Interface.

Table 1. Audio Amplifier A23 Interface

Connector	Function	Characteristics
J1-1	Audio Input	From A5
J1-2	Audio Ground	From A5
J1-3	Spare	
J2-1	Ground	
J2-2	Ground	
J2-3	External Audio Output	To Rear Panel J7, 2.5 watts/8 ohms
J2-4	External Audio Output	To Rear Panel J7, 2.5 watts/8 ohms
J2-5	External Audio Output	To Rear Panel J7, 2.5 watts/8 ohms
J2-6	External Audio Output	To Rear Panel J7, 2.5 watts/8 ohms
J3-1	Power	+15 Vdc, 45 mA (quiescent)
J3-2	Ground	
J3-3	Spare	
E1	Speaker Audio Output	To Front Panel Speaker, 2.5 watts/8 ohms
E2	Speaker Audio Ground	To Front Panel Speaker
E3	Speaker Audio Shield	To Front Panel Speaker

3. MAINTENANCE

There are no adjustments or alignments on the A23 assembly.

4. PARTS LIST

Table 2 is a comprehensive parts list of all replaceable components in Audio Amplifier Assembly A23. When ordering parts from the factory, include a full description of the part. Use figure 1, Audio Amplifier Assembly A23 Component Location Diagram to identify parts.

5. SCHEMATIC DIAGRAMS

Figure 2 is the Audio Amplifier Assembly A23 schematic diagram.

Table 2. Audio Amplifier Assembly A23 Parts List (PL 10073-5800)

Ref. Desig.	Part Number	Description
	10073-5800	PWB, AUDIO AMPLIFIER
C1	1075-1039	CAPACITOR, ALUM, ELEC, 20 VDC, 680UF
C2	M39014/02-1320	CAP .47UF 10% 50V CER-R
C3	C26-0025-100	CAP 10UF 20% 25V TANT
C4	10073-7047	CAPACITOR
C5	M39014/02-1302	CAP .022UF 20% 100V CER
C6	10073-7048	CAPACITOR
C7	M39014/02-1320	CAP .47UF 10% 50V CER-R
E1	MP-0287	CONNECTOR PIN
E2	MP-0287	CONNECTOR PIN
E3	MP-0287	CONNECTOR PIN
J1	J46-0022-003	HDR 3 PIN SINGLE
J2	J-0870	CONN , 10 PIN
J3	J46-0022-003	HDR 3 PIN SINGLE
L1	10073-7043	INDUCTOR
R1	R65-0003-183	RES 18K 5% 1/4W CAR FILM
R2	R65-0003-202	RES 2.0K 5% 1/4W CAR FILM
R3	R65-0003-279	RES 2.7 5% 1/4W CAR FILM
R4	R65-0003-681	RES 680 5% 1/4W CAR FILM
R5	R65-0003-510	RES 51 5% 1/4W CAR FILM
U1	10073-7119	IC AUDIO AMP

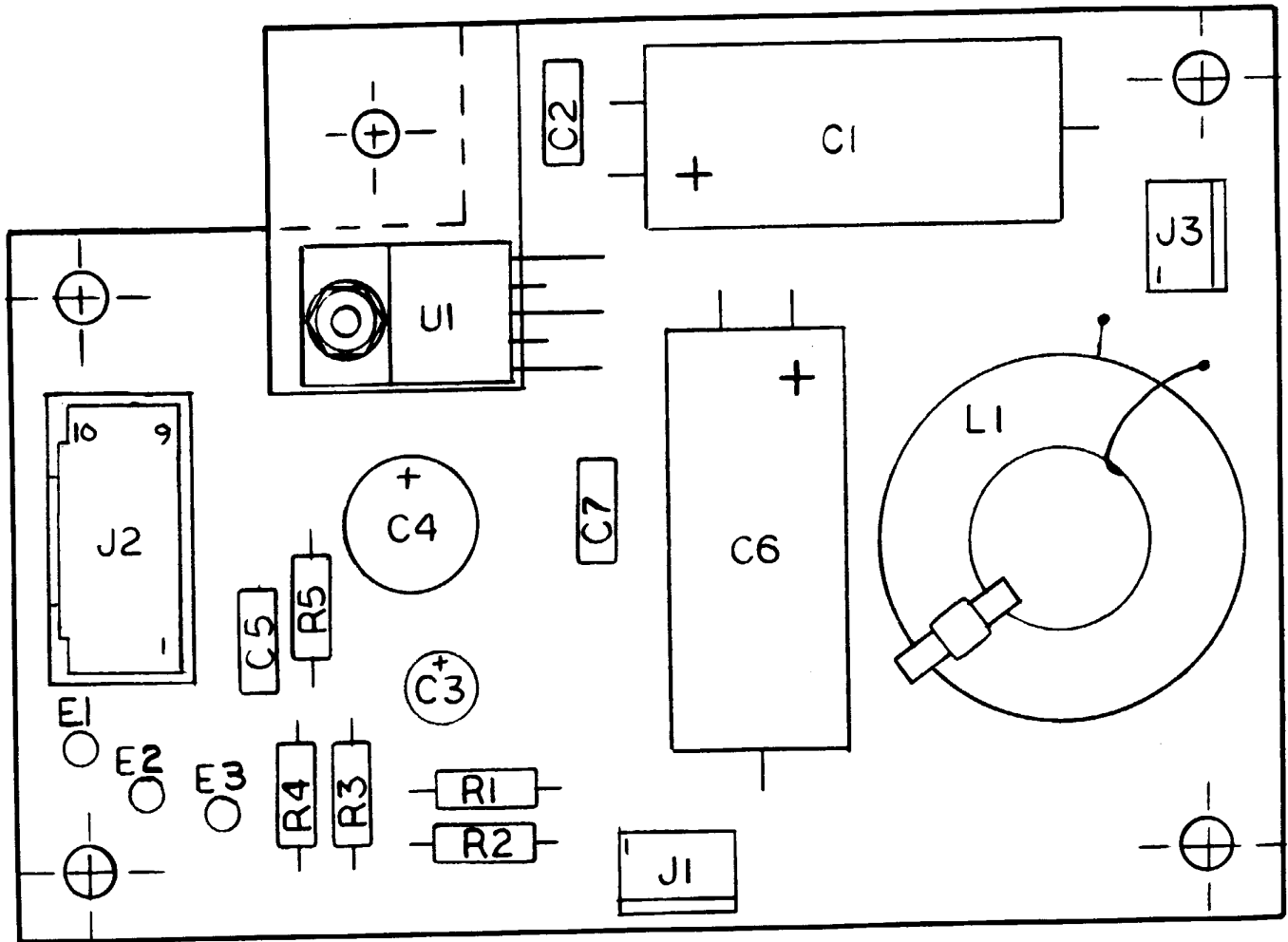


Figure 1. Audio Amplifier Assembly A23 Component Location Diagram (10073-5800, Rev. D)

- NOTE: UNLESS OTHERWISE SPECIFIED:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. FOR A COMPLETE DESIGNATION, PREFIX WITH UNIT NO. AND/OR ASSEMBLY NO. DESIGNATION.
 2. ALL RESISTOR VALUES ARE IN OHMS, 1/4W, ±5%.
 3. ALL CAPACITOR VALUES ARE IN MICROFARADS.
 4. VENDOR PART NO. CALLOUTS ARE FOR REFERENCE ONLY. COMPONENTS ARE SUPPLIED PER PART NO. IN PARTS LIST.

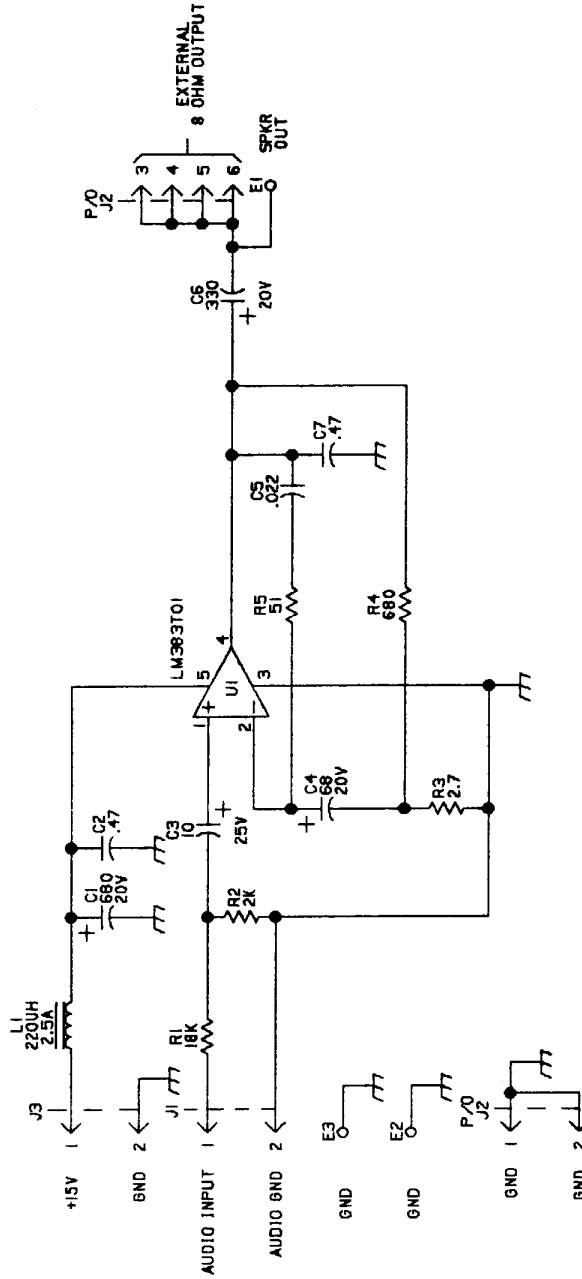


Figure 2. Audio Amplifier Assembly A23 Schematic Diagram (10073-5801, Rev. D)

TECHNICAL PUBLICATION EVALUATION FORM

To the User of This Instruction Manual:

HARRIS Corporation, RF Communications Group continually evaluates its technical publications for completeness, technical accuracy, and organization. You can assist in this process by completing and returning this form. Please specify section, page number, figure or table number where applicable.

MANUAL TITLE: _____

MANUAL NUMBER: _____ REVISION: _____ COVER DATE: _____

GENERAL	EXCELLENT	GOOD	FAIR	POOR
TEXT	[]	[]	[]	[]
SETUP/ALIGNMENT INST.	[]	[]	[]	[]
TROUBLESHOOTING INST.	[]	[]	[]	[]
TABLES	[]	[]	[]	[]
ILLUSTRATIONS	[]	[]	[]	[]
PARTS LISTS	[]	[]	[]	[]
SCHEMATIC DIAGRAMS	[]	[]	[]	[]

GENERAL COMMENTS: Please include your suggestions for improvements to the manual. Specify section, page, paragraph, figure number, or table number as applicable. Attach examples or extra pages if more space is needed.

**INTRODUCTION SECTION:
COMMENT** _____

**INSTALLATION SECTION:
COMMENT** _____

**OPERATION SECTION:
COMMENT** _____

**THEORY OF OPERATION SECTION (Technical Descriptions):
COMMENT** _____

**MAINTENANCE SECTION:
COMMENT** _____

**SUB-ASSEMBLY SECTIONS:
COMMENT** _____

TEAR HERE

NAME: _____ DATE: _____

COMPANY: _____

ADDRESS: _____

CITY: _____ STATE: _____

ZIP: _____ COUNTRY: _____

PHONE NUMBER (INCLUDE AREA CODE): _____

NOTE

U.S. POSTAL REGULATIONS NO LONGER PERMIT THE USE OF STAPLES. PLEASE SEAL THIS FORM WITH TAPE.

MAKE FIRST FOLD HERE

TEAR HERE

MAKE LAST FOLD HERE



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 4033 ROCHESTER, N.Y.

POSTAGE WILL BE PAID BY ADDRESSEE

HARRIS CORPORATION
RF Communications Group
1680 University Avenue
Rochester, New York 14610 U.S.A.

ATTN: Publications Department

TAPE HERE

RF-P-671D



HARRIS

HARRIS CORPORATION RF COMMUNICATIONS GROUP
1030 University Avenue Rochester, New York 14610 USA
Tel: 716-244-8830 Fax: 716-244-2917, 716-325-1572 • TELEX: 240313 RFCOM UR