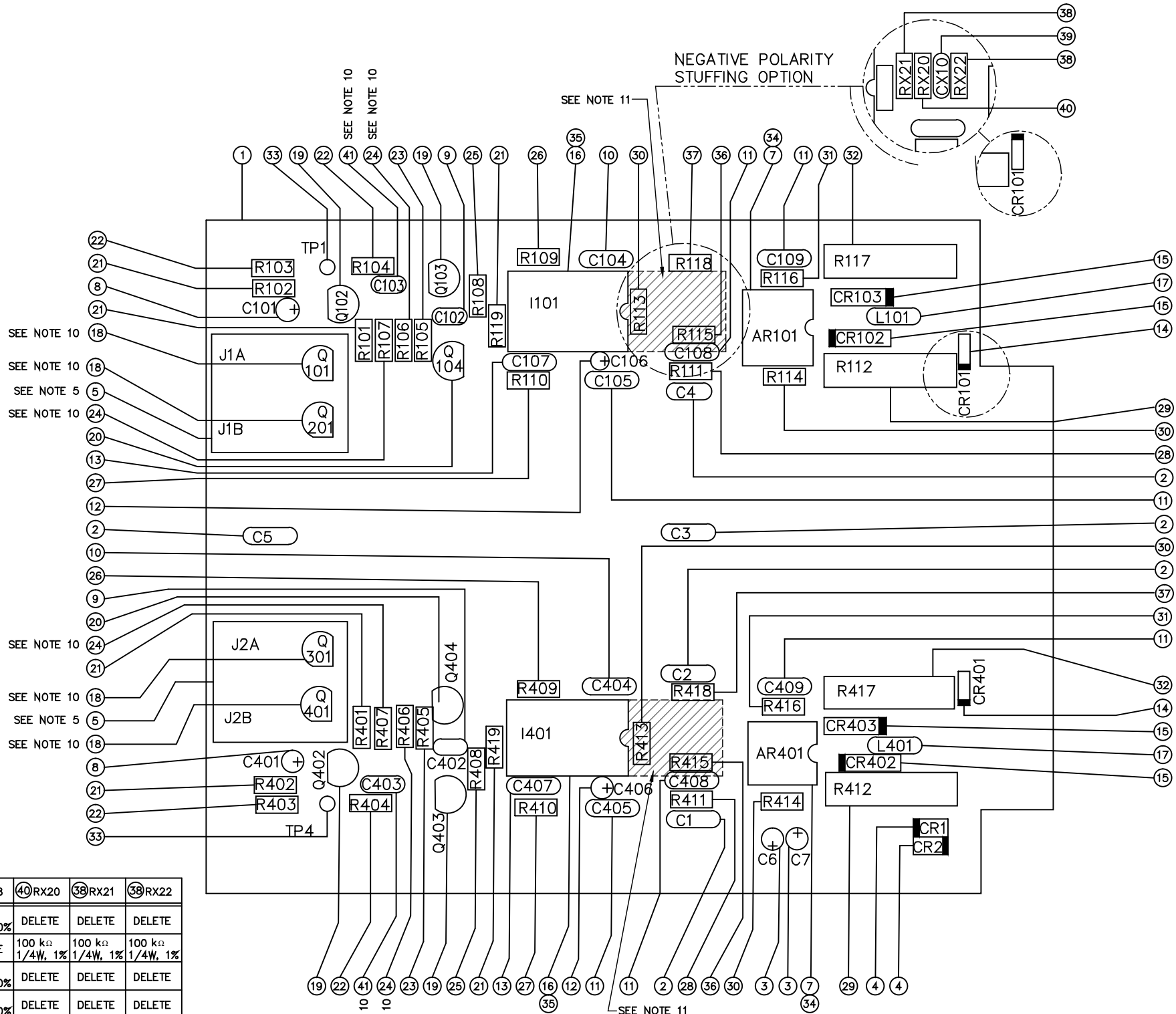


PART NUMBER					FUNCTION		
CHOOSE 1 OPTION FOR EACH CHANNEL					INPUT FREQUENCY	OUTPUT VOLTAGE	NORMAL BANDWIDTH
ORA	CH4	CH3	CH2	CH1	EMPTY		
2HC	1	0	0	0	9		
	1	1	1	1	1 to 10 kHz	0 to +10 VDC	10 Hz
	2	2	2	2	1 to 10 kHz	0 to -10 VDC	10 Hz
	3	3	3	3	1 to 10 kHz	0 to +5 VDC	10 Hz
	4	4	4	4	1 to 10 kHz	0 to +1 VDC	10 Hz
	5	5	5	5	1 to 10 kHz	0 to -5 VDC	10 Hz
	6	6	6	6	5 to 10 kHz	0 to +10 VDC	100 Hz
	7	7	7	7	5 to 10 kHz	-2 to +10 VDC	400 Hz
	8	8	8	8	5 to 10 kHz	-1 to +1 VDC	300 Hz
	9	9	9	9			

NOTES:

- CHANNEL 3 IS STUFFED THE SAME AS CHANNEL 1 AND CHANNEL 2 IS STUFFED THE SAME AS CHANNEL 4.
- THE FIRST DIGIT IN CHANNEL 2 COMPONENT NUMBER IS 2 AND THE FIRST DIGIT IN CHANNEL 3 COMPONENT NUMBER IS 3. FOR EXAMPLE RX01 IS R201 FOR CHANNEL 2 AND R301 FOR CHANNEL 3.
- POSITIVE POLARITY STUFFING IS SHOWN FOR CHANNELS 1 AND 4. WHEN STUFFING A NEGATIVE POLARITY OPTION, DELETE RX015 AND RX18, INSTALL CX10, RX20, RX21, AND RX22. INSTALL CRX01 FOR NEGATIVE POLARITY AS SHOWN IN DETAIL.
- QX02 AND QX03 ARE 2N5210, T1S097 ARE USED IN OLDER BOARDS AND ARE STUFFED WITH THE FLAT SIDE FACING THE OPPOSITE DIRECTION, MAY BE REPLACED WITH 2N5210.
- REMOVE PLATING FROM "FIBER OPTIC CONNECTOR" MOUNTING HOLES.
- PRETEST ALL PHOTO TRANSISTORS BEFORE STUFFING BOARDS.
- MAKE SURE PHOTO TRANSISTORS ARE INSERTED INTO CONNECTORS COMPLETELY.
- COMPONENT HEIGHT MUST NOT EXCEED 0.400" ABOVE COMPONENT FACE OF BOARDS.
- BOARDS MADE PREVIOUS TO 6/13 USED 8IC000453 FOR IX01 (ITEM 16) FOR ALL CHANNEL OPTIONS.
- ON BOARDS MADE BEFORE S/N 31440, QX01 (ITEM 18) WAS 8QB000022 RX06,7 (ITEM 24) WAS 8RA010541, AND CX03 (ITEM 41) WAS 8CA000198.
- KEEP COMPONENT HEIGHT IN THESE AREAS LOW ENOUGH TO AVOID INTERFERENCE WITH PCBs WHICH EXTEND OUT OVER THEM.



CHANNEL OPTIONS

OPTION	13 CX07	11 CX08	11 CX09	39 CX10	14 CRX01	16 IX01	28 RX11	30 RX14	36 RX15	37 RX18	40 RX20	38 RX21	38 RX22
1	0.47 μ F 50V	0.1 μ F 100V	0.1 μ F 100V	DELETE	IN4744, INSTALL FOR + POLARITY	2HR011220 STANDARD	249 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	47 k Ω 1/4W, 10%	DELETE	DELETE	DELETE
2	0.47 μ F 50V	0.1 μ F 100V	0.1 μ F 100V	0.1 μ F 100V	IN4744, INSTALL FOR - POLARITY	2HR011220 STANDARD	249 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	DELETE	DELETE	100 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%
3	0.47 μ F 50V	0.1 μ F 100V	0.1 μ F 100V	DELETE	IN4744, INSTALL FOR + POLARITY	2HR011220 STANDARD	249 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	196 k Ω 1/4W, 1%	100 k Ω 1/4W, 10%	DELETE	DELETE	DELETE
4	0.47 μ F 50V	0.1 μ F 100V	0.1 μ F 100V	DELETE	IN4744, INSTALL FOR + POLARITY	2HR011220 STANDARD	249 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	1 M Ω 1/4W, 1%	470 k Ω 1/4W, 10%	DELETE	DELETE	DELETE
5	0.47 μ F 100V	0.1 μ F 100V	0.1 μ F 100V	0.1 μ F 100V	IN4744, INSTALL FOR - POLARITY	2HR011220 STANDARD	249 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	DELETE	DELETE	100 k Ω 1/4W, 1%	196 k Ω 1/4W, 1%	196 k Ω 1/4W, 1%
6	0.047 μ F 100V	0.01 μ F 100V	0.0033 μ F 200V	DELETE	IN4744, INSTALL FOR + POLARITY	2HR011220 STANDARD	49.9k Ω 1/4W, 1%	49.9k Ω 1/4W, 1%	24.9k Ω 1/4W, 1%	22 k Ω 1/4W, 10%	DELETE	DELETE	DELETE
7	0.022 μ F 100V	0.0033 μ F 200V	820 PF 100V	DELETE	SA15CA BIPOLAR	2HR011221 FAST	24.9k Ω 1/4W, 1%	51 k Ω 1/4W, 5%	22 k Ω 1/4W, 10%	18 k Ω 1/4W, 10%	DELETE	DELETE	DELETE
8	0.022 μ F 100V	0.005 μ F 250V	820 PF 1000V	DELETE	SA10CA BIPOLAR	2HR011221 FAST	24.9k Ω 1/4W, 1%	35.7 k Ω 1/4W, 1%	100 k Ω 1/4W, 1%	51 k Ω 1/4W, 5%	DELETE	DELETE	DELETE
9													

D	ADDED NOTE 11	NLP/4/23/19/PJOM/2/19														
C	REV'D ITEMS 18,24 ADD ITEM 41 & NOTE 10	BMB/6/15/GMD/6/15														
B	REV'D OPT. 7 & 8, ADDED NOTE 9	BMB/6/14/GMD/6/14														
A	ADDED OPTIONS 7 & 8	NLP/6/30/16/JAH/6/30/16														
NO.	REVISION	BY	DATE	CHK	DATE	CHECKED	SLL									
TOLERANCES AND FINISH UNLESS OTHERWISE SPECIFIED											DESIGNED					
FRACTIONAL SIZES	JOSS & DEC	ANGLE SIZES	WASH COAT	THIRD ANGLE PROJECTION	SCALE	NTS										
											PART NO.					
											SEE TABLE	D	REV. NO.	8-3-19	LOC	CV