

INSTALL EITHER  
U101A AND U102A  
OR  
U101B AND S101B

+5V1A +20 mA

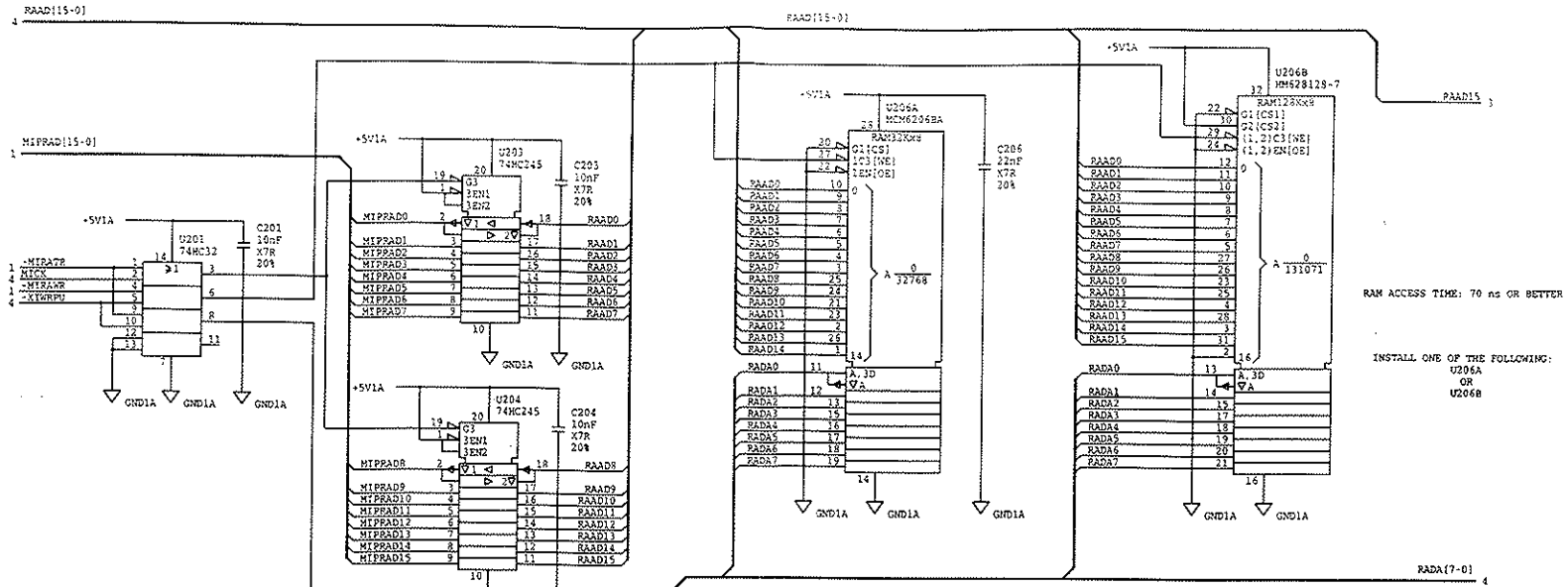
- 15 ICDA
- 9 AUBFRD
- 9 AUBFRD1
- 9 AUBFRD2
- 12 AUBD
- 9 AUBEX1
- 9 AUBEX2
- 9 AUBEX3
- 9 AUBEX4
- 9 AUBEX5
- 16 BDP1
- 16 BDP2
- 1 VIL101

SETTING	STANDARD
IP	B, B-PAL, D-PAL, G-PAL, H-PAL, I-PAL, K-PAL
MP	M-PAL
MN	M, H-VTSC
LS	B-SECAM, C-SECAM, D-SECAM, G-SECAM, R-SECAM, K1-SECAM, L-SECAM
HD	N-VTSC, H-PAL (MONOCHROME MENU ONLY)
NOT SUPPORTED	A, E, E-SECAM

DATE	DRAWN	CHECKED	ECO NO.	REV	RELE
	Remy			1	

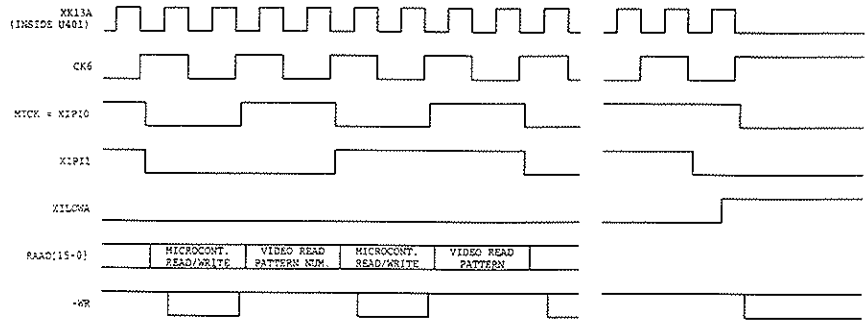
CLASSÉ AUDIO INC.  
**GENSSP1**  
 MICROCONTROLLER  
 DRAWING NO. GENSSP1/DSCH SHEET 1 OF 20

SSP-50



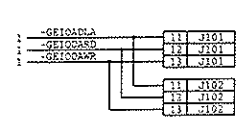
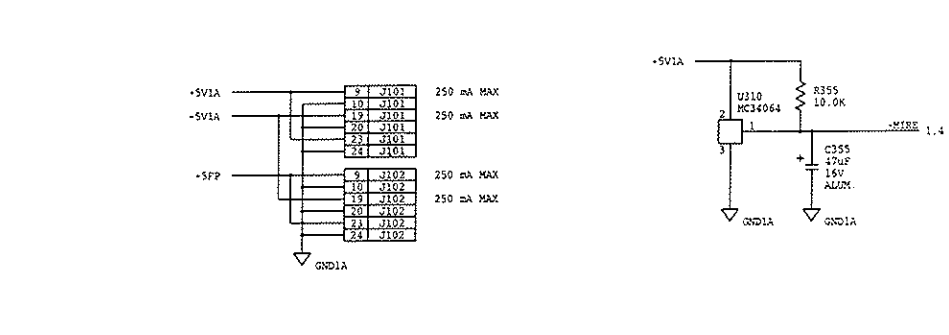
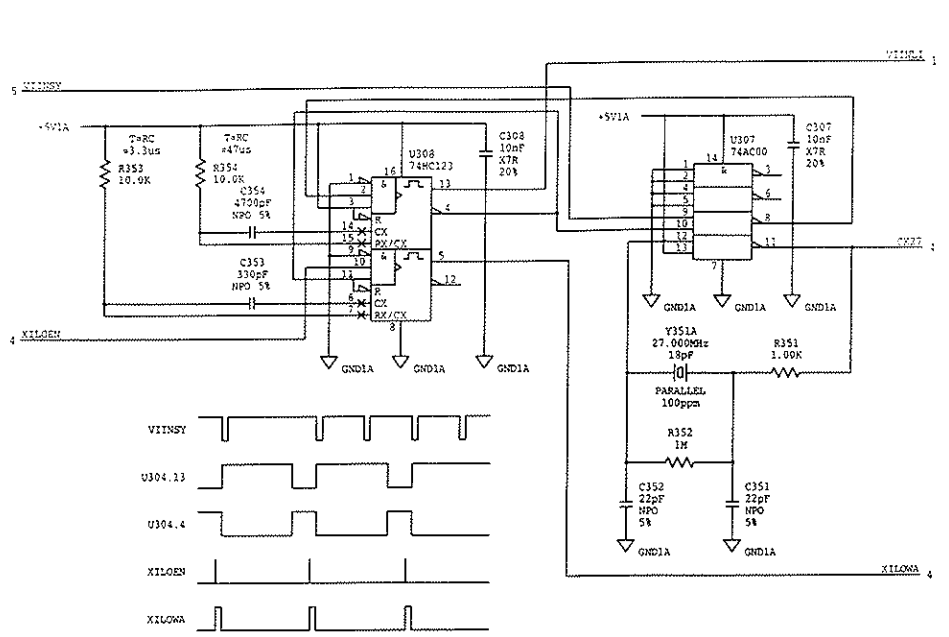
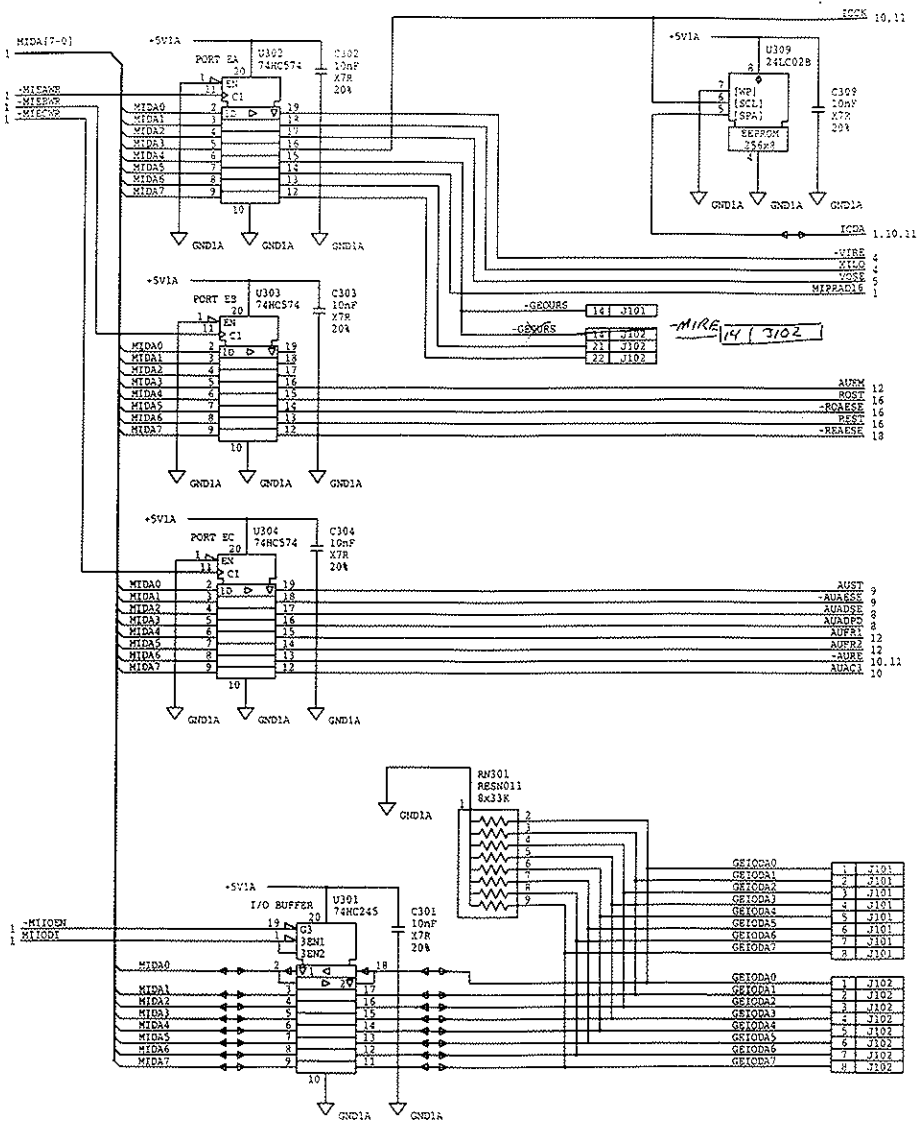
RAM ACCESS TIME: 70 ns OR BETTER

INSTALL ONE OF THE FOLLOWING:  
U206A  
OR  
U206B



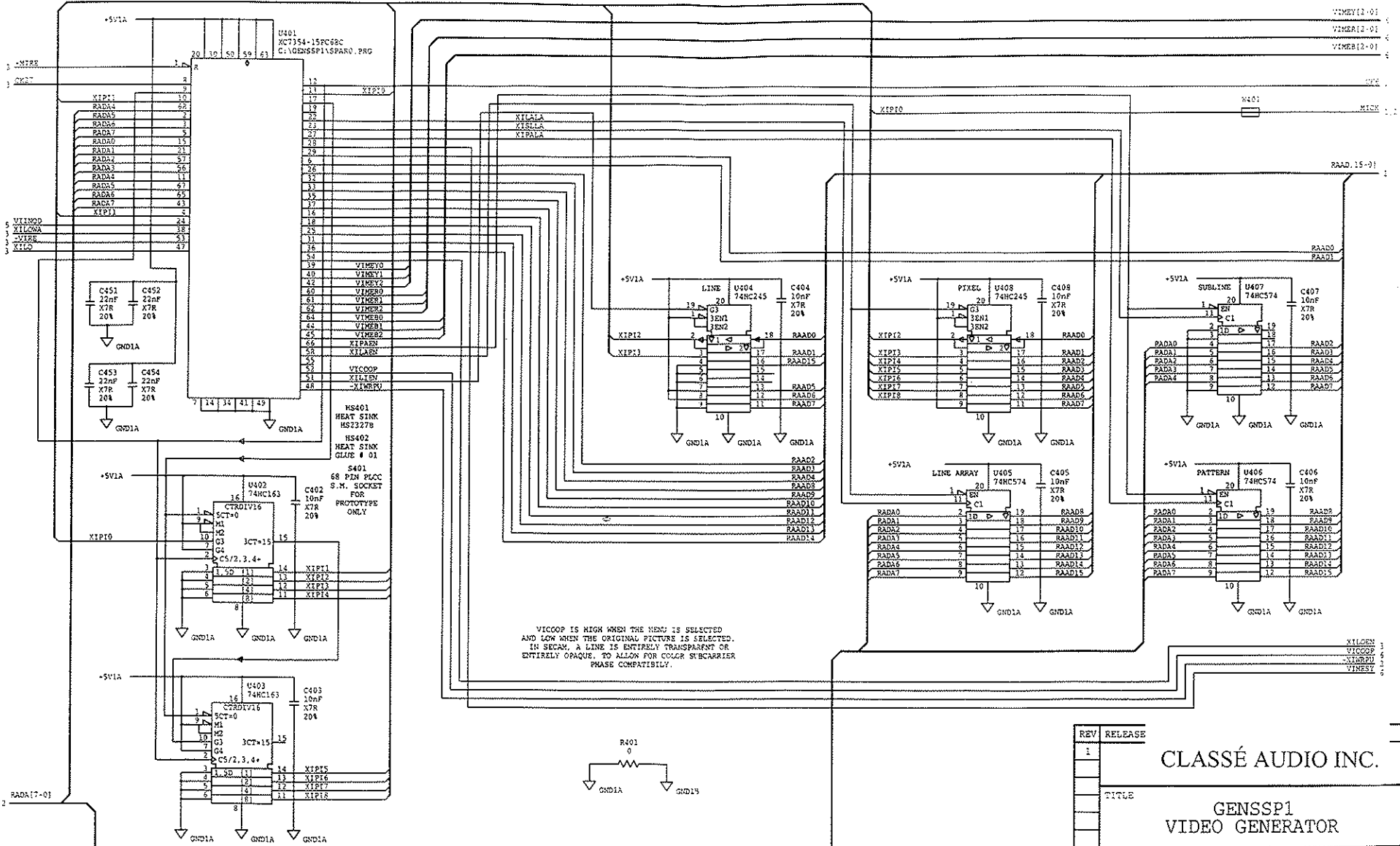
+5V1A 170 mA

REV	RELEA
1	CLASSÉ AUDIO INC.
TITLE	
GENSSP1 MICROCONTROLLER RAM	
DRAWING NO.	
GENSSP1/DSCH	SHEET 2 OF 2D



REV	RELE
1	
<b>CLASSÉ AUDIO INC.</b> TITLE <b>GENSSP1          I/O AND VIDEO LINE</b>	
DRAWING NO.	GENSSP1/DSC8
	SHEET 3 OF 20

+5V1A 10 mA



REV	RELEASE
1	

**CLASSÉ AUDIO INC.**

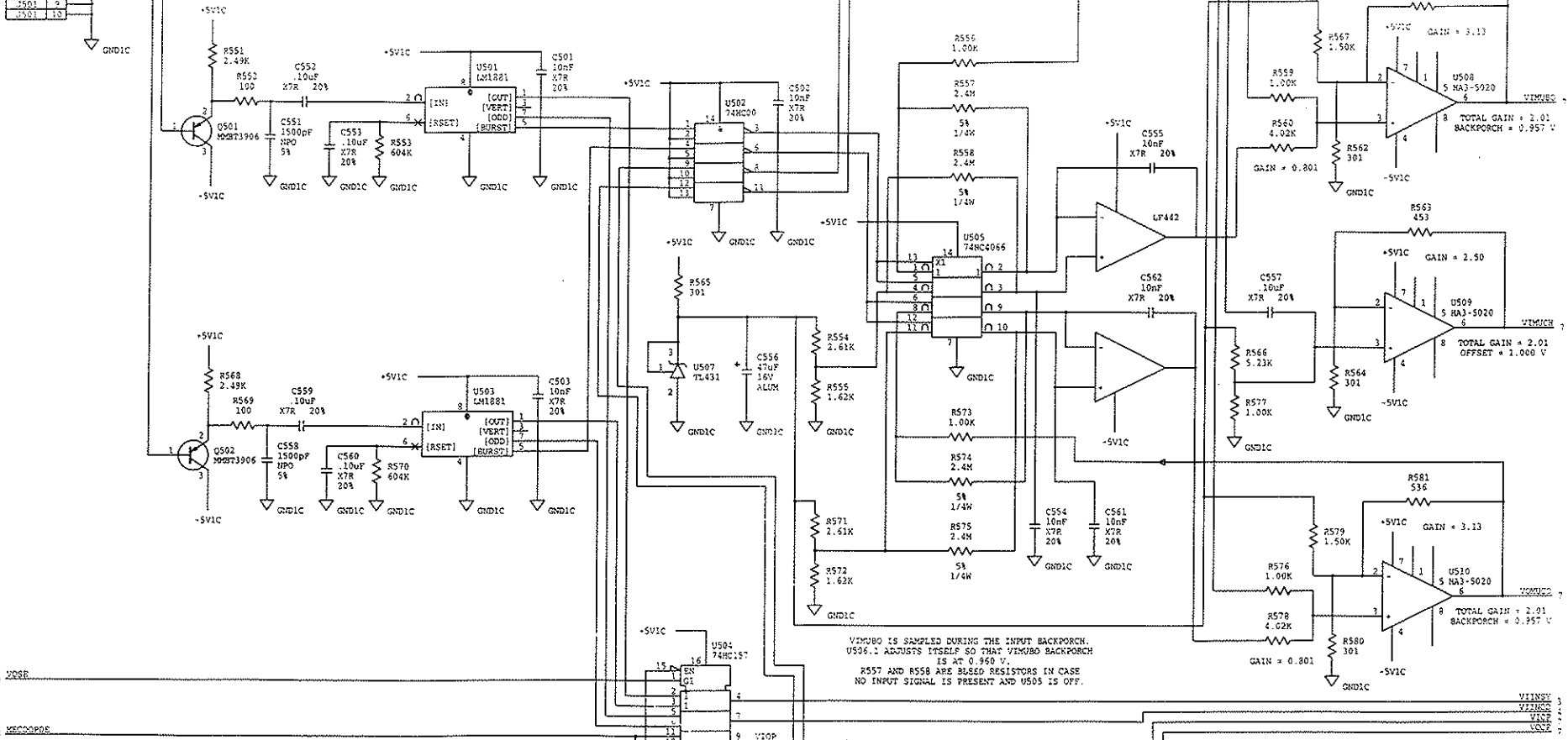
TITLE  
**GENSSP1  
VIDEO GENERATOR**

DRAWING NO. GENSSP1/DSCH

SHEET 4 OF 23

3501	1
3501	2
3501	3
3501	4
3501	5
3501	6
3501	7
3501	8
3501	9
3501	10
3501	11
3501	12

*comp main or luv main*  
*chr main*  
*comp reset*



VIMUBO IS SAMPLED DURING THE INPUT BACKPORCH.  
 U506.1 ADJUSTS ITSELF SO THAT VIMUBO BACKPORCH  
 IS AT 0.960 V.  
 R57 AND R58 ARE BUSED RESISTORS IN CASE  
 NO INPUT SIGNAL IS PRESENT AND U505 IS OFF.

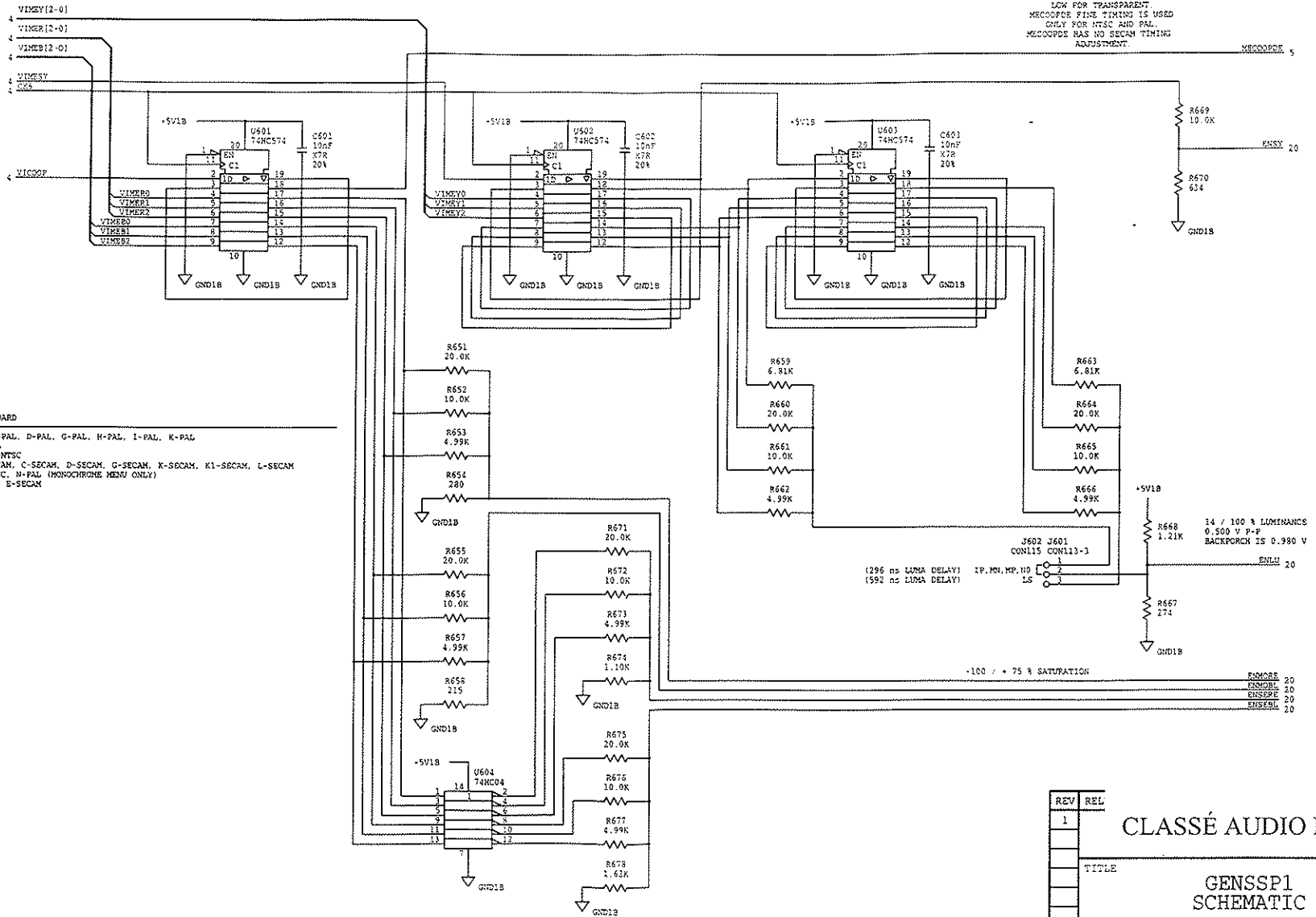
+5V1C 40 mA  
 -5V1C 30 mA

+5V1C	C508 22nF X7R 20%	C509 22nF X7R 20%	C510 22nF X7R 20%
-5V1C	C511 22nF X7R 20%	C512 22nF X7R 20%	C513 22nF X7R 20%

REV	REL	<b>CLASSÉ AUDIO INC.</b>
1		
TITLE		<b>GENSSP1 VIDEO CLAMPS</b>
DRAWING NO.		GENSSP1/DSCH
		SHEET 5 OF 25D

HIGH FOR MENU SELECT.  
 LOW FOR TRANSPARENT.  
 MCOOPDE FINE TIMING IS USED  
 ONLY FOR NTSC AND PAL.  
 MCOOPDE HAS NO SECAM TIMING  
 ADJUSTMENT.

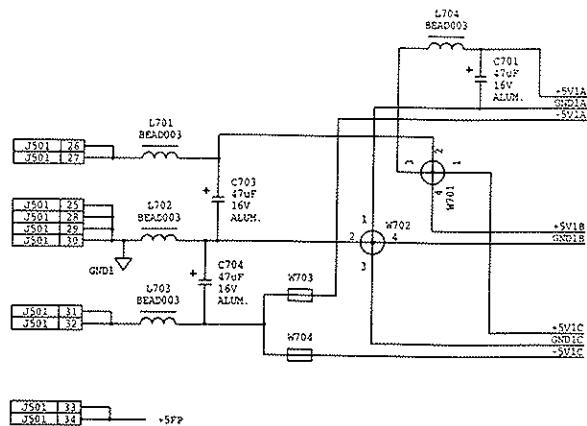
MCOOPDE 5



SETTING	STANDARD
IP	B, B-PAL, D-PAL, G-PAL, H-PAL, I-PAL, K-PAL
MP	M-PAL
IN	M, H-NTSC
LS	B-SECAM, C-SECAM, D-SECAM, G-SECAM, K-SECAM, L-SECAM
NO	N-NTSC, N-PAL (MONOCHROME MENU ONLY)
NOT SUPPORTED	A, E, S-SECAM

+5V18 20 PA

REV	REL	TITLE
1		CLASSÉ AUDIO INC.
		GENSSP1 SCHEMATIC
DRAWING NO.		GENSSP1/DSCN
		SHEET 6 OF 20



THE FOLLOWING SIGNALS MUST BE INPUT ON JS01:

GEVIMBO: CHANNEL 1 INPUT LUMINANCE OR COMPOSITE, GAIN = 0.80 BACKPORCH BETWEEN 0.000 AND 1.200 V

GEVINCH: CHANNEL 1 INPUT CHROMINANCE, GAIN = 0.50 OFFSET BETWEEN -2.000 AND 2.000 V

GEVINDO: CHANNEL 2 INPUT COMPOSITE, GAIN = 0.80 BACKPORCH BETWEEN 0.000 AND 1.200 V

THE FOLLOWING AOUTETS ARE PRESENTED ON JS01:

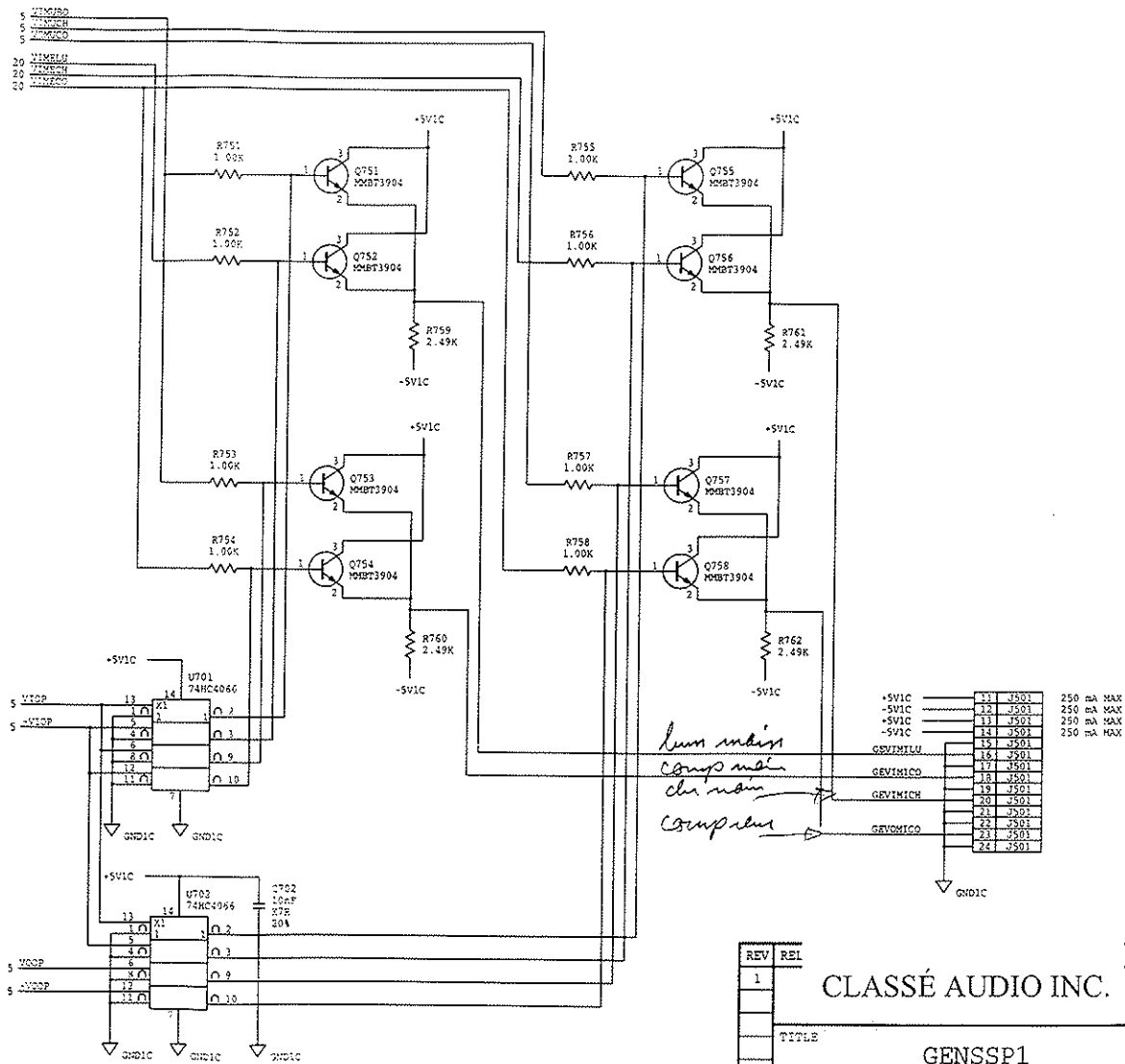
GEVINLU: CHANNEL 1 OUTPUT LUMINANCE, GAIN = 2.00 BACKPORCH = 0.310 V

GEVINCH: CHANNEL 1 OUTPUT CHROMINANCE, GAIN = 2.00 OFFSET = 0.350 V

GEVINCO: CHANNEL 1 OUTPUT COMPOSITE, GAIN = 2.00 BACKPORCH = 0.310 V

GEVINCO: CHANNEL 2 OUTPUT CHROMINANCE, GAIN = 2.00 BACKPORCH = 0.310 V

+5V1C 5 mA  
+5V1C 15 mA



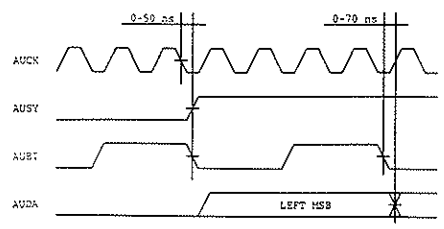
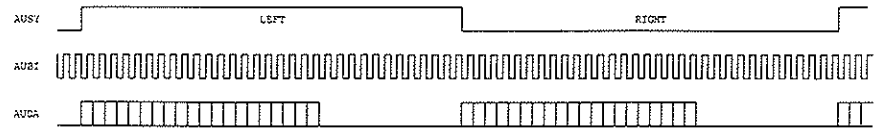
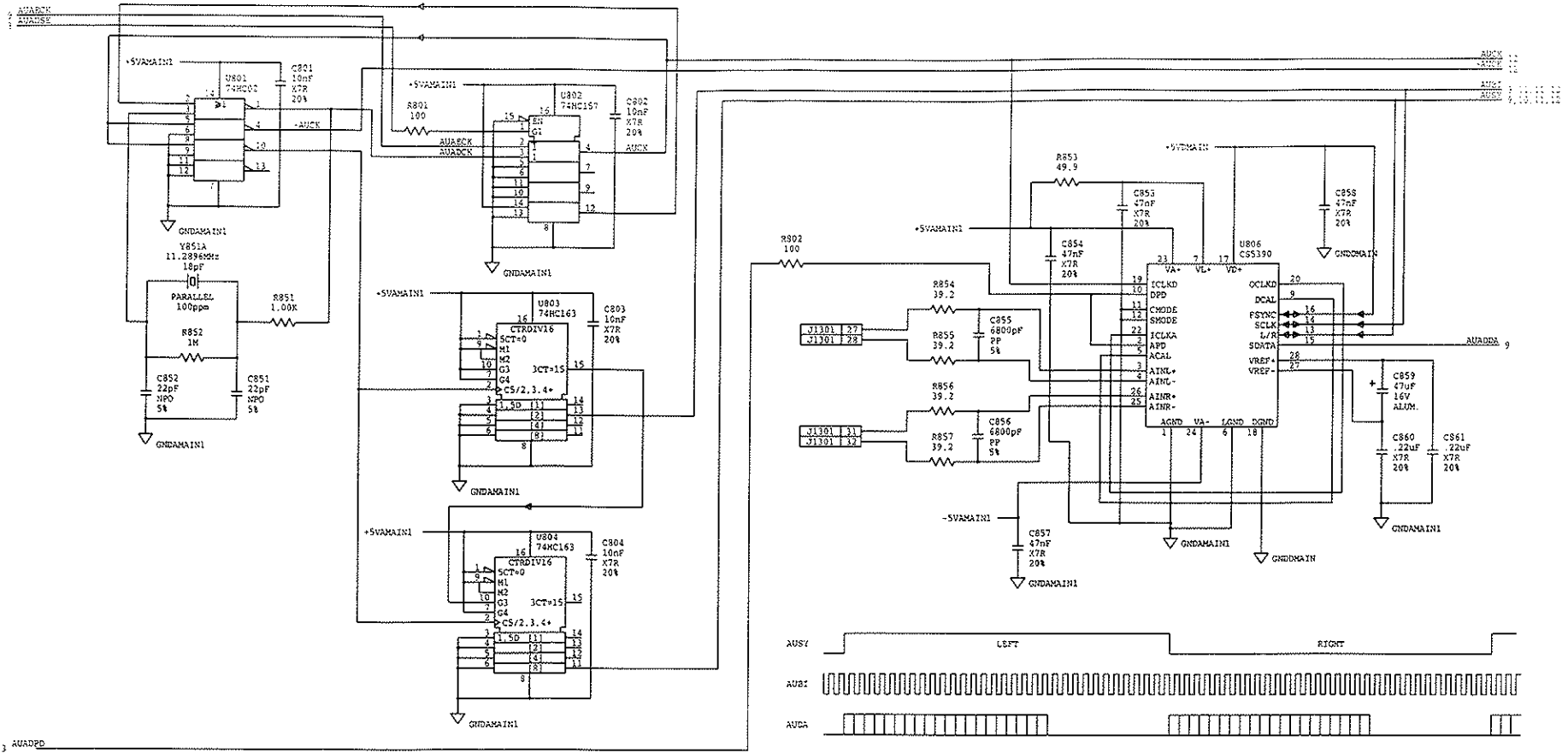
+5V1C	11	JS01	250 mA MAX
-5V1C	12	JS01	250 mA MAX
+5V1C	13	JS01	250 mA MAX
-5V1C	14	JS01	250 mA MAX
	15	JS01	
	16	JS01	
	17	JS01	
GEVINLU	18	JS01	
GEVINCH	19	JS01	
GEVINCO	20	JS01	
	21	JS01	
	22	JS01	
	23	JS01	
	24	JS01	

REV	REL
1	

CLASSÉ AUDIO INC.

TITLE  
GENSSP1  
VIDEO MULTIPLEXERS

DRAWING NO. GENSSP1/DSCH SHEET 7 OF 20



REV	RELE
1	

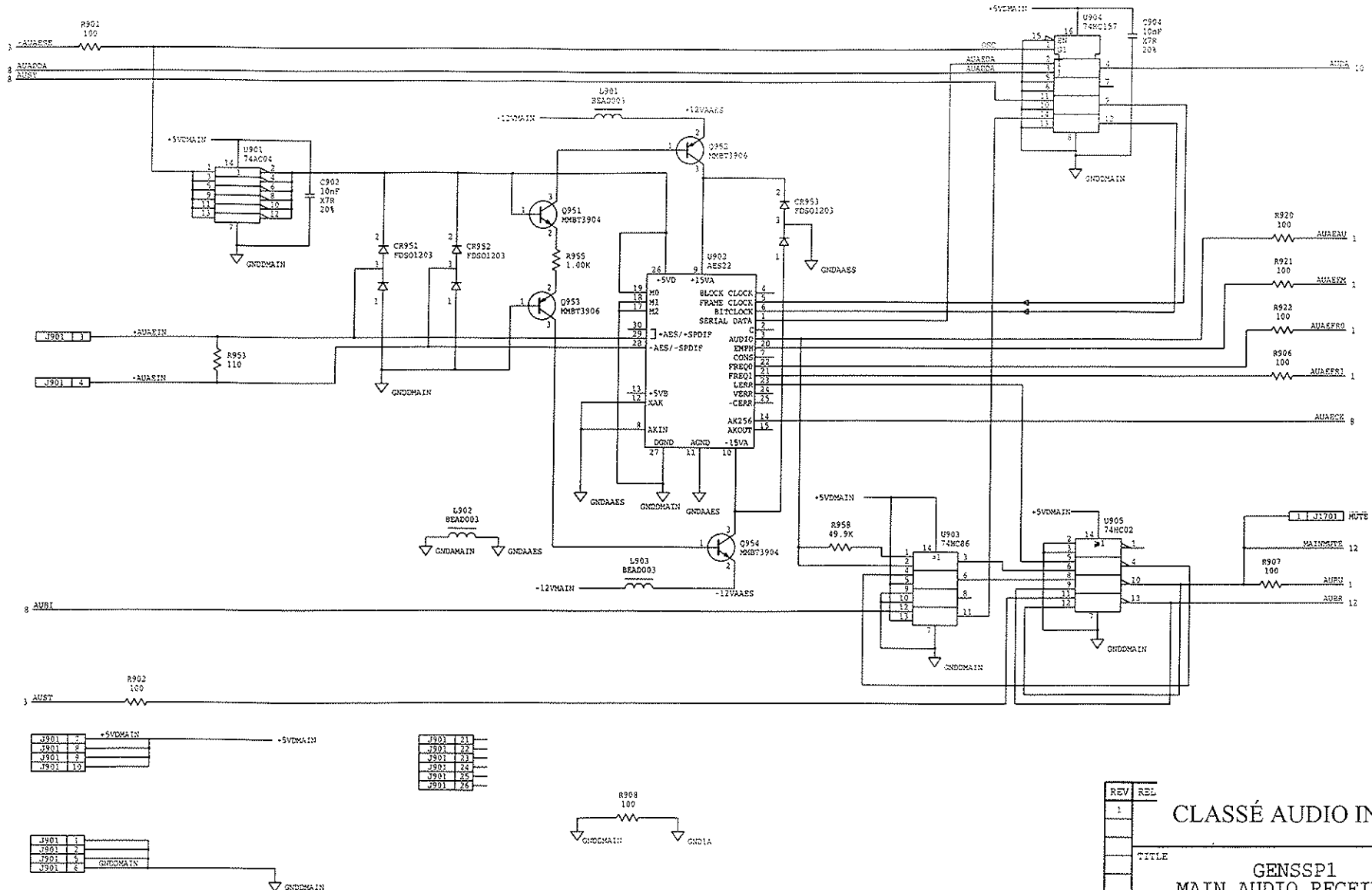
CLASSÉ AUDIO INC.

TITLE  
GENSSP1  
MAIN AUDIO A/D

DRAWING NO. GENSSP1/DSCH SHEET 8 OF 20

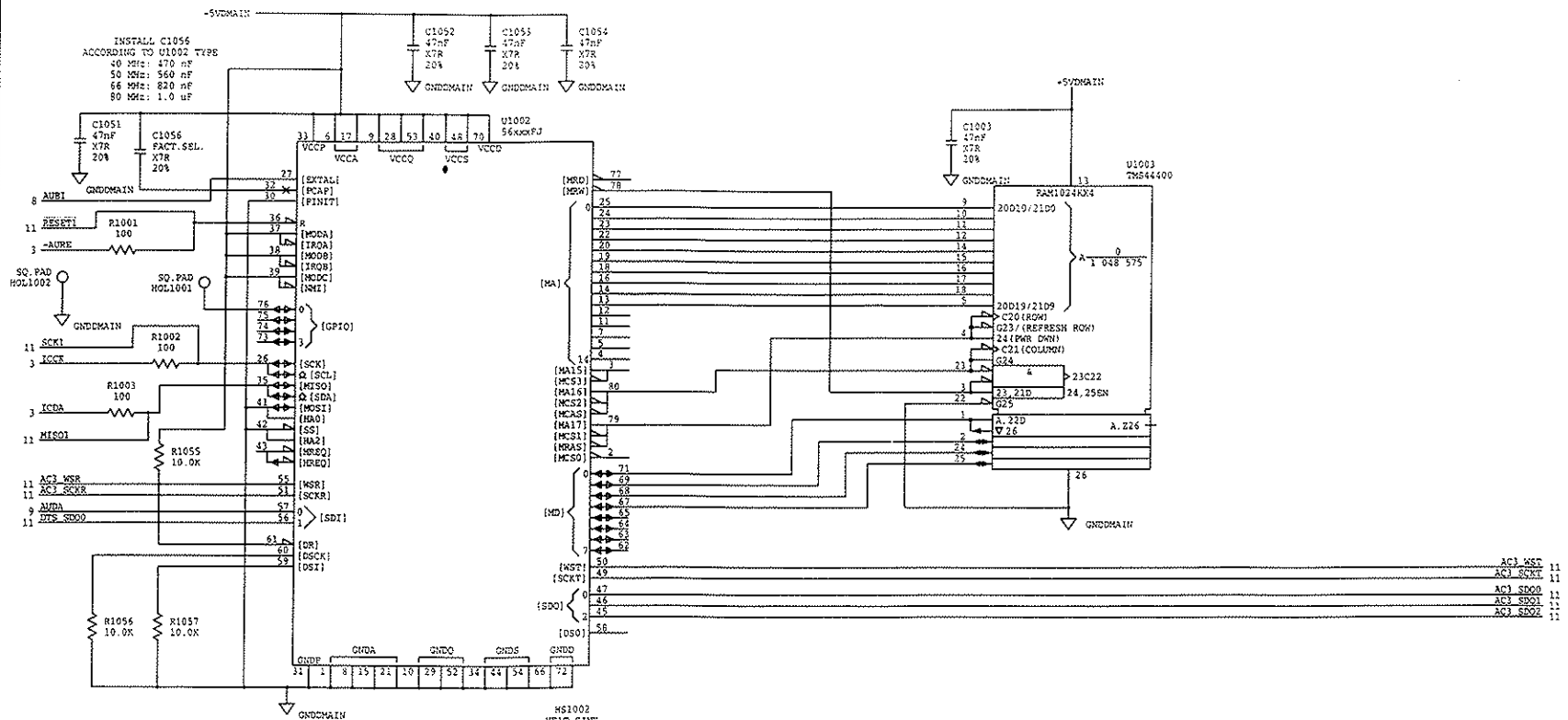
-SVAI 20 mA - 50 mA  
-SVAI 50 mA  
-SVDAUD 50 mA





+12VA 70 mA  
 +12VB 5 mA  
 +5VQUAD 10 mA + 40 mA IF U902 ACTIVE

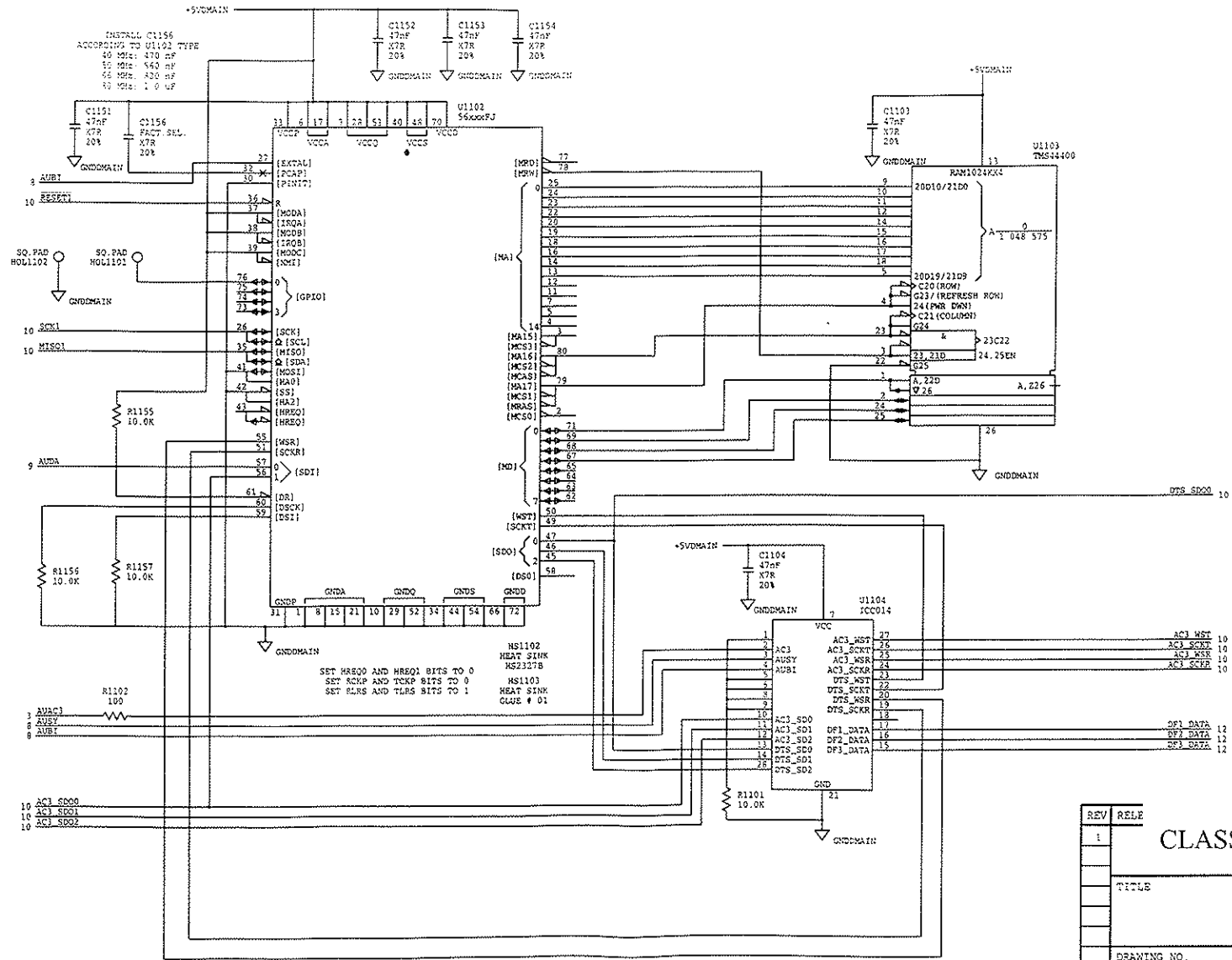
REV	REL	CLASSÉ AUDIO INC.	
1		TITLE	
		GENSSP1 MAIN AUDIO RECEIVER	
		DRAWING NO.	SHEET 9 OF 28
		GENSSP1/DSCH	



SET HREQ0 AND HREQ1 BITS TO 0  
 SET BCKP AND TCKP BITS TO 0  
 SET PLRS AND TLRS BITS TO 1

HS1002  
 HEAT SINK  
 HS2327B  
 HS1003  
 HEAT SINK  
 GAGE # 01

REV	REL		
1		CLASSÉ AUDIO INC.	
		TITLE GENSSP1 DSP AC3	
		DRAWING NO.	SHEET 10 OF 20
		GENSSP1/DSCH	

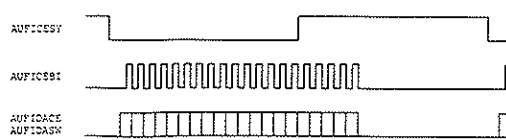
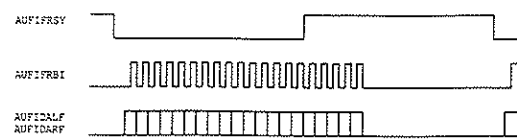
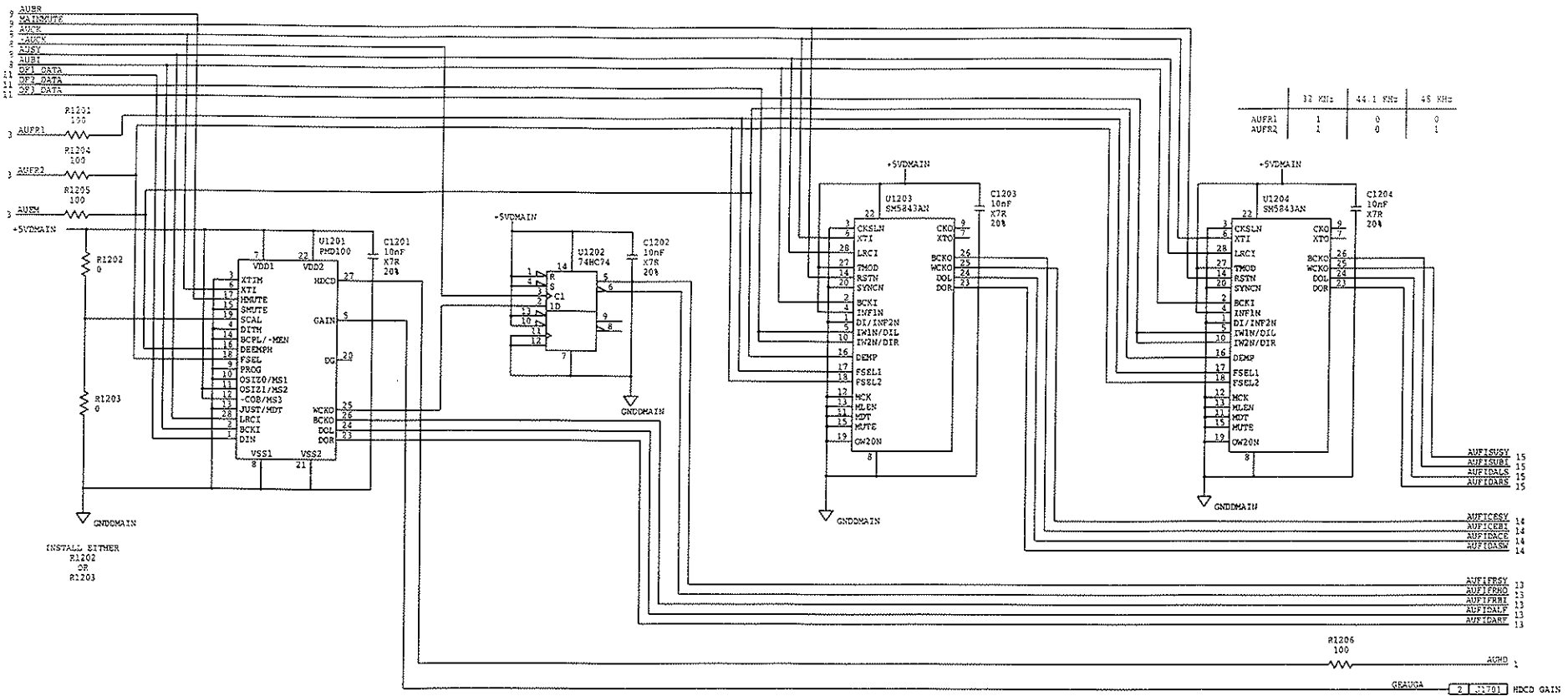


REV	RELE
1	

CLASSÉ AUDIO INC.

TITLE  
GENSSP1  
DSP DTS

DRAWING NO. GENSSP1/DSCH SHEET 11 OF 20



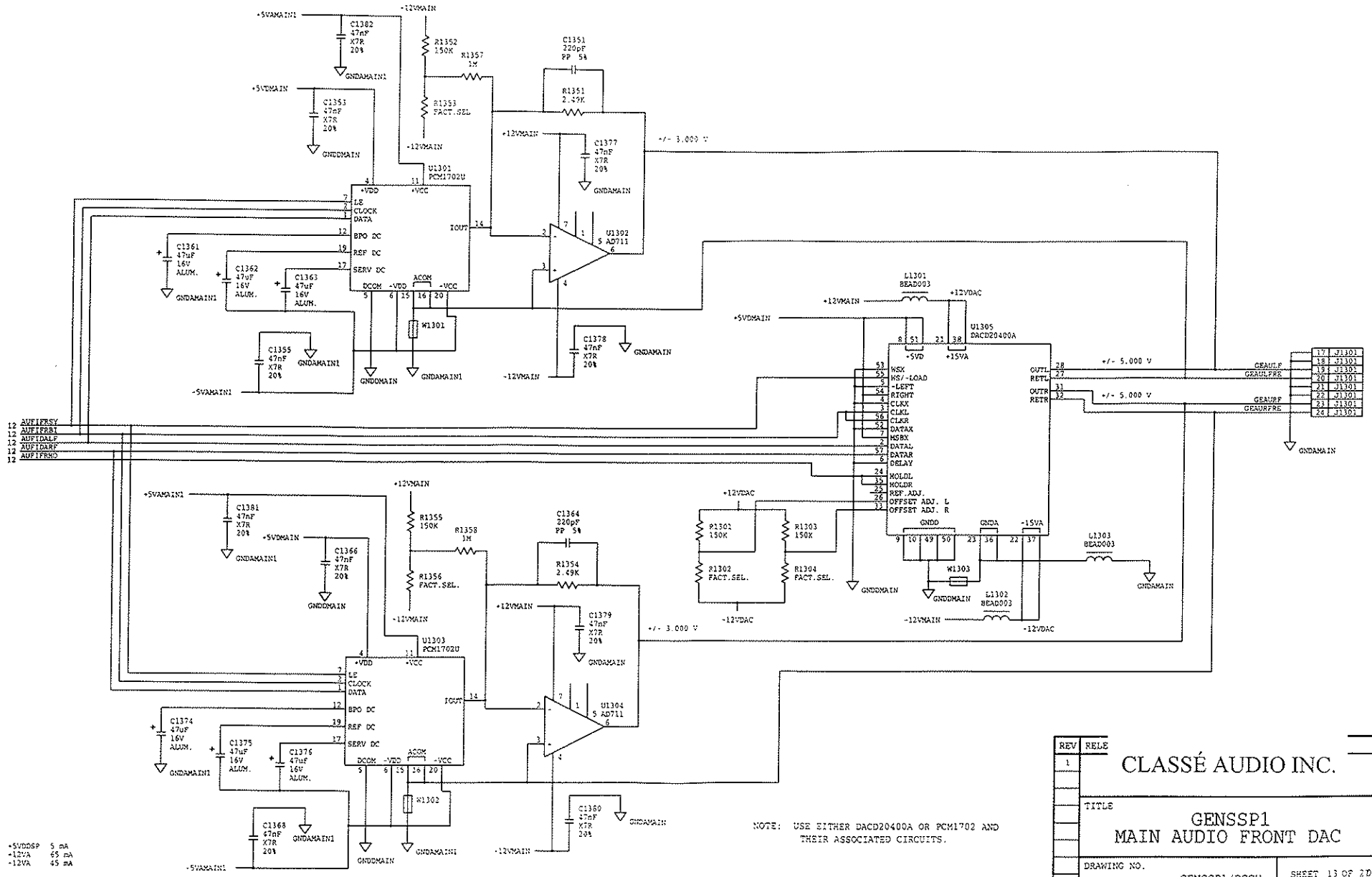
+5VDAUD 235 mA

REV	RELE
1	

**CLASSÉ AUDIO INC.**

TITLE  
**GENSSP1  
MAIN AUDIO DIG. FILTERS**

DRAWING NO. **GENSSP1/DSCH** SHEET 12 OF 20



12 AUFIFRSY  
12 AUFIFRBI  
12 AUFIDALE  
12 AUFIDARY  
12 AUFIFRSO

+5VDDSP 5 mA  
-12VA 65 mA  
-12VA 45 mA

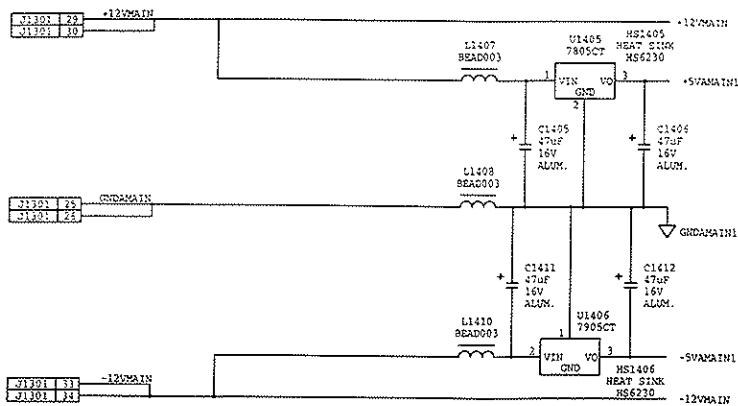
NOTE: USE EITHER DACD20400A OR PCM1702 AND THEIR ASSOCIATED CIRCUITS.

REV	RELE
1	

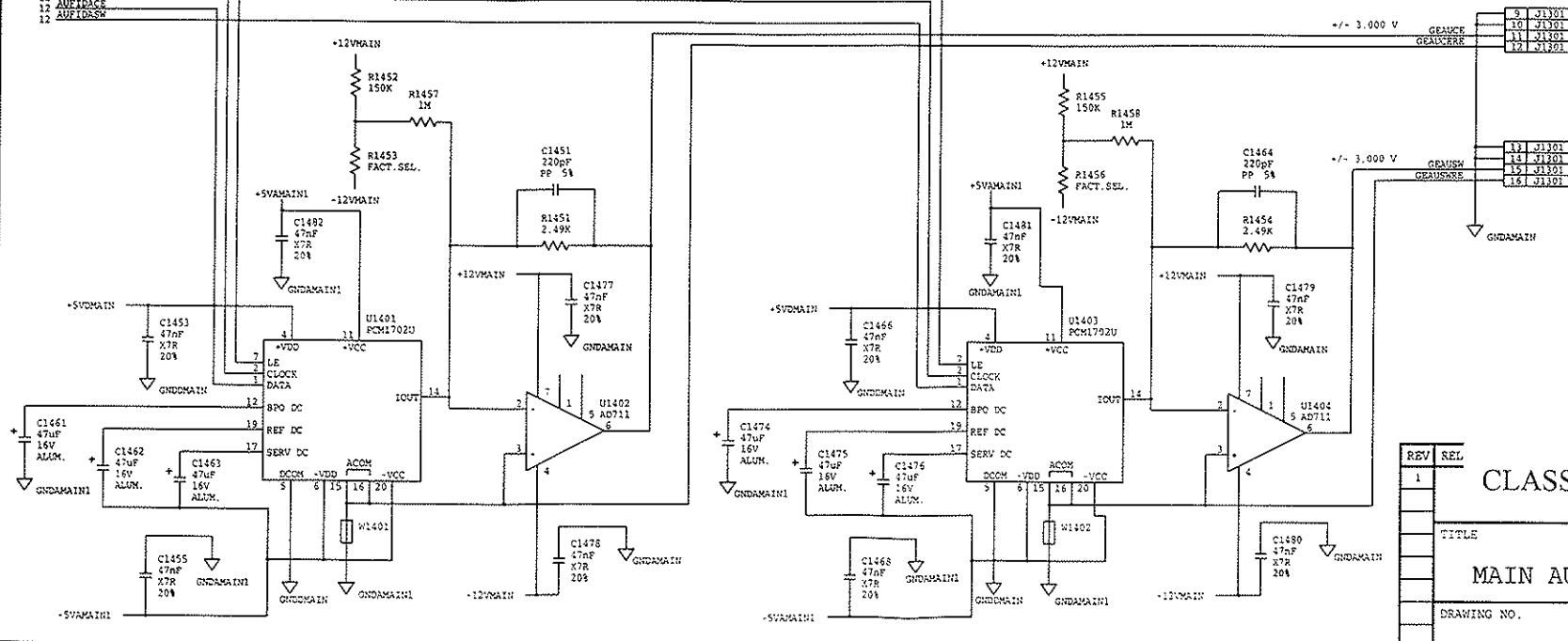
CLASSÉ AUDIO INC.

TITLE  
GENSSP1  
MAIN AUDIO FRONT DAC

DRAWING NO. GENSSP1/DSCH SHEET 13 OF 20



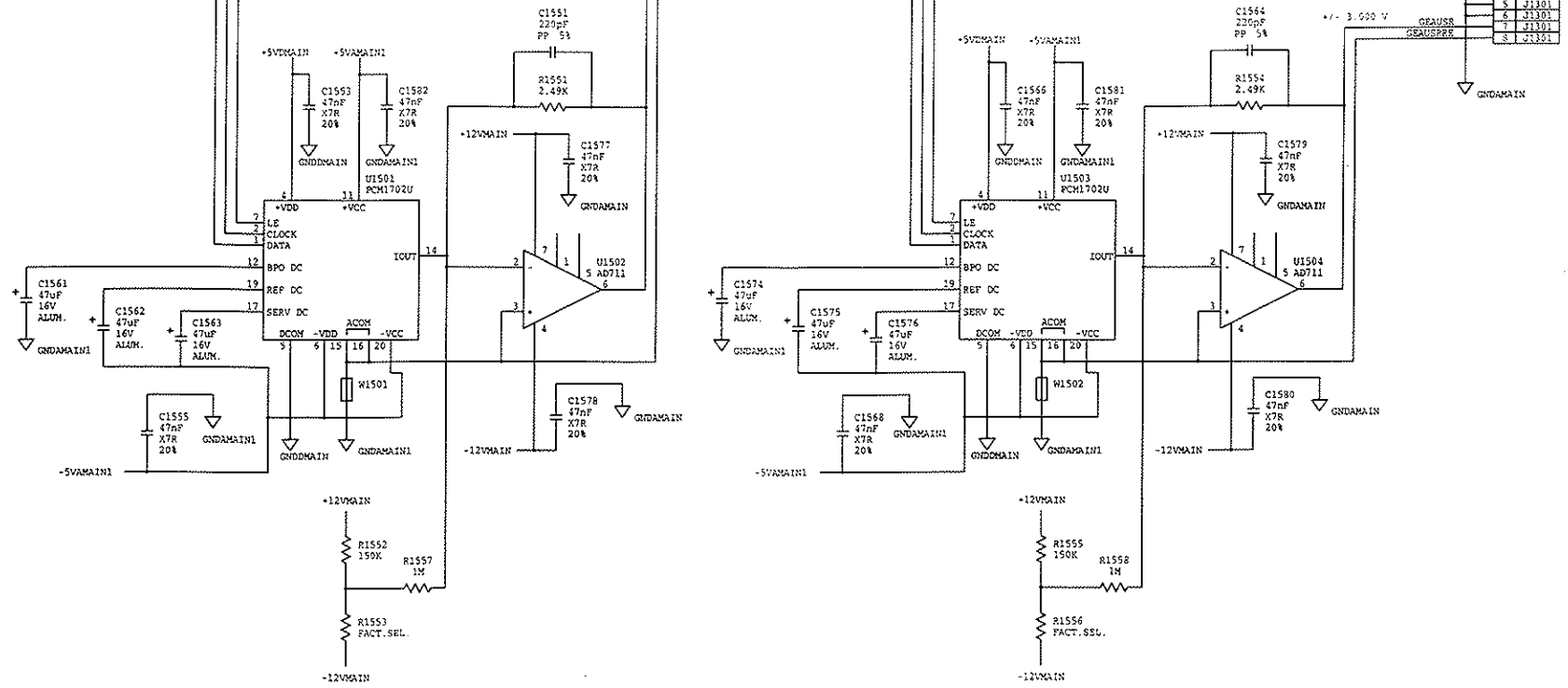
12 AUFICBSV  
12 AUFICBT  
12 AUFIDACE  
12 AUFIDASH



+5VA 10 mA  
+5VA 50 mA  
-12VA 10 mA  
-12VA 10 mA

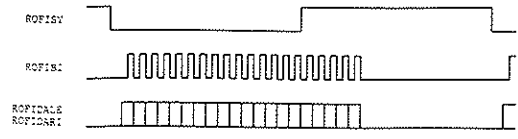
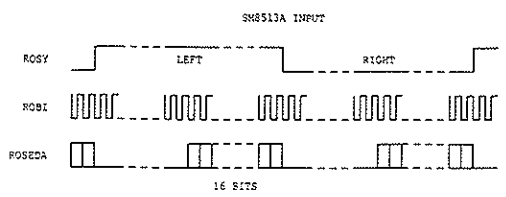
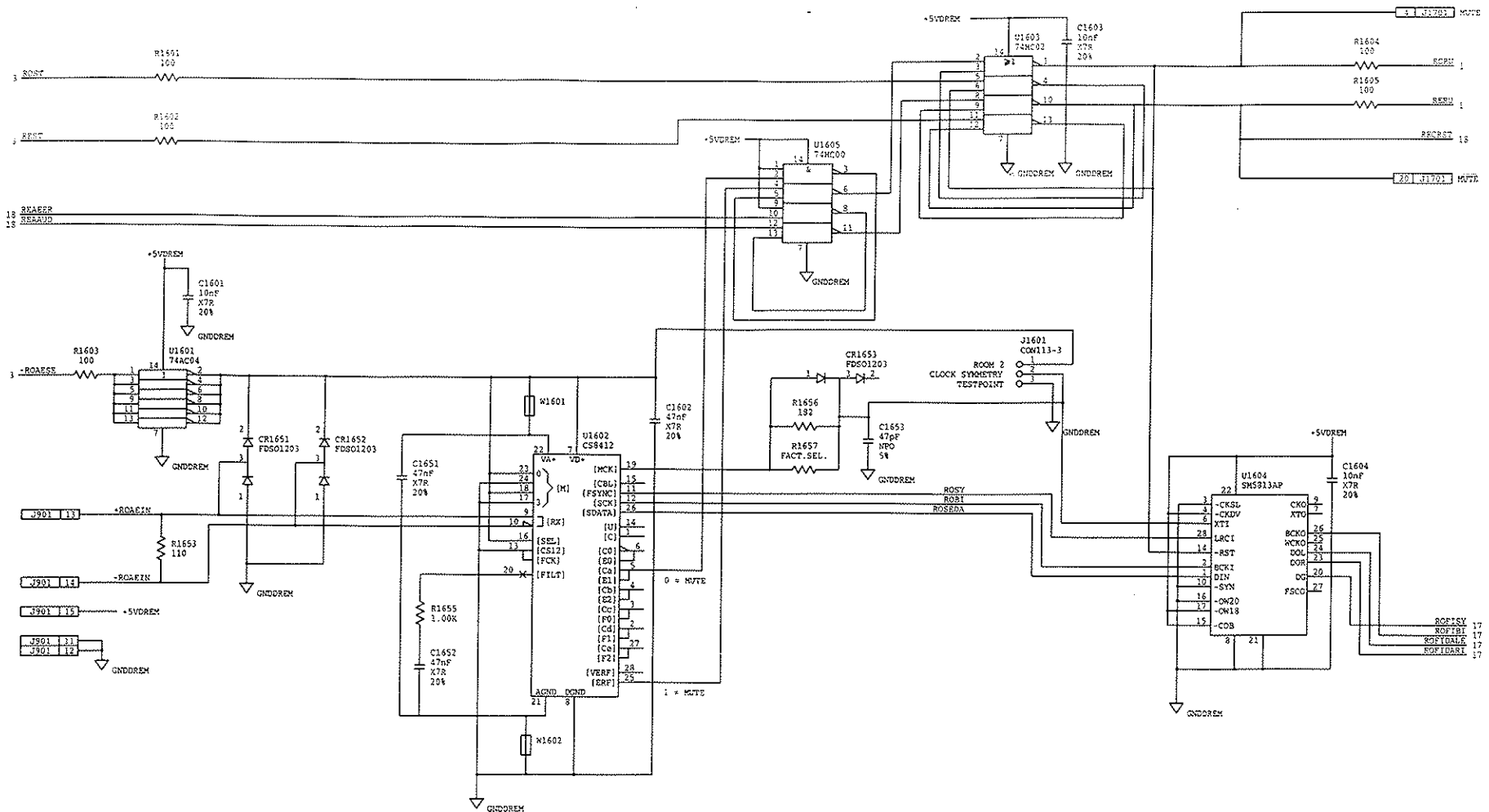
REV	REL	TITLE
1		GENSSP1 MAIN AUDIO CENTER DAC
DRAWING NO.		GENSSP1/DSCH
		SHEET 14 OF 20

13 AUF1501Y  
 12 AUF1501Y  
 11 AUF1501S  
 10 AUF1501S  
 9 AUF1501S



+5V2H 10 mA  
 +5V2H 50 mA  
 +15V2H 10 mA  
 +15V2H 10 mA

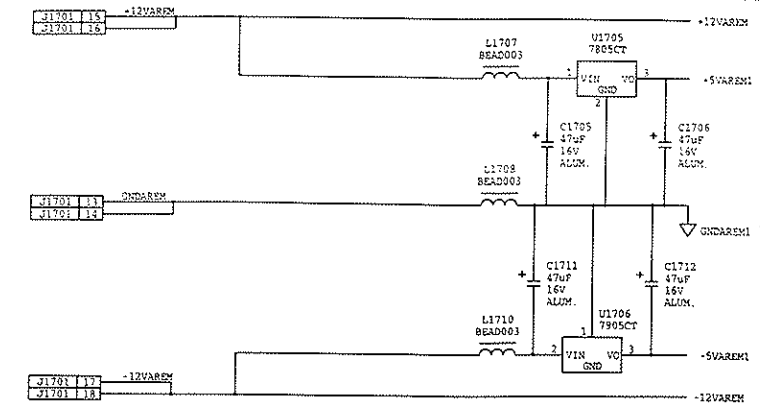
REV	RELE	CLASSÉ AUDIO INC.	
1		TITLE	
		GENSSP1 MAIN AUDIO SURROUND DAC	
		DRAWING NO.	SHEET 15 OF 20
		GENSSP1/DSCH	



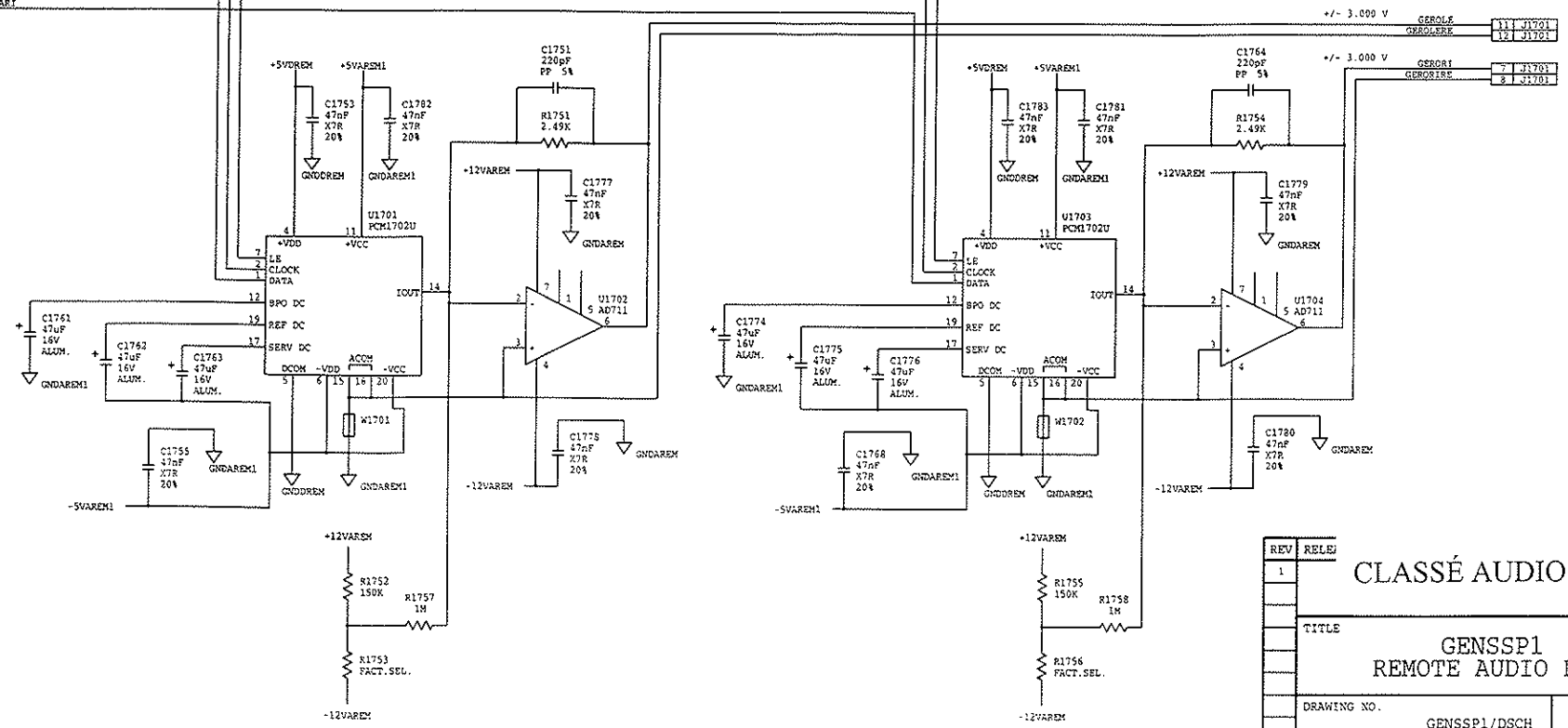
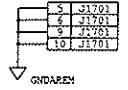
+5V3A 45 mA  
+5V3B 45 mA

REV	REL	CLASSÉ AUDIO INC.
1		
TITLE		GENSSP1 REMOTE AUDIO RECEIVER
DRAWING NO.		GENSSP1/DSCH
		SHEET 16 OF 24





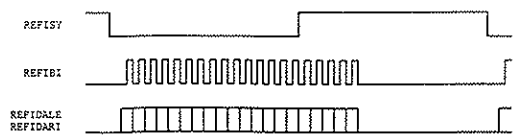
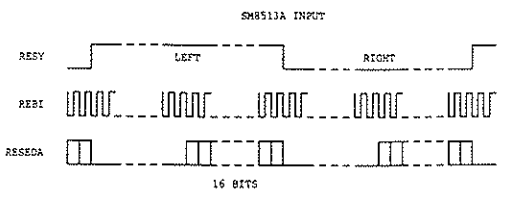
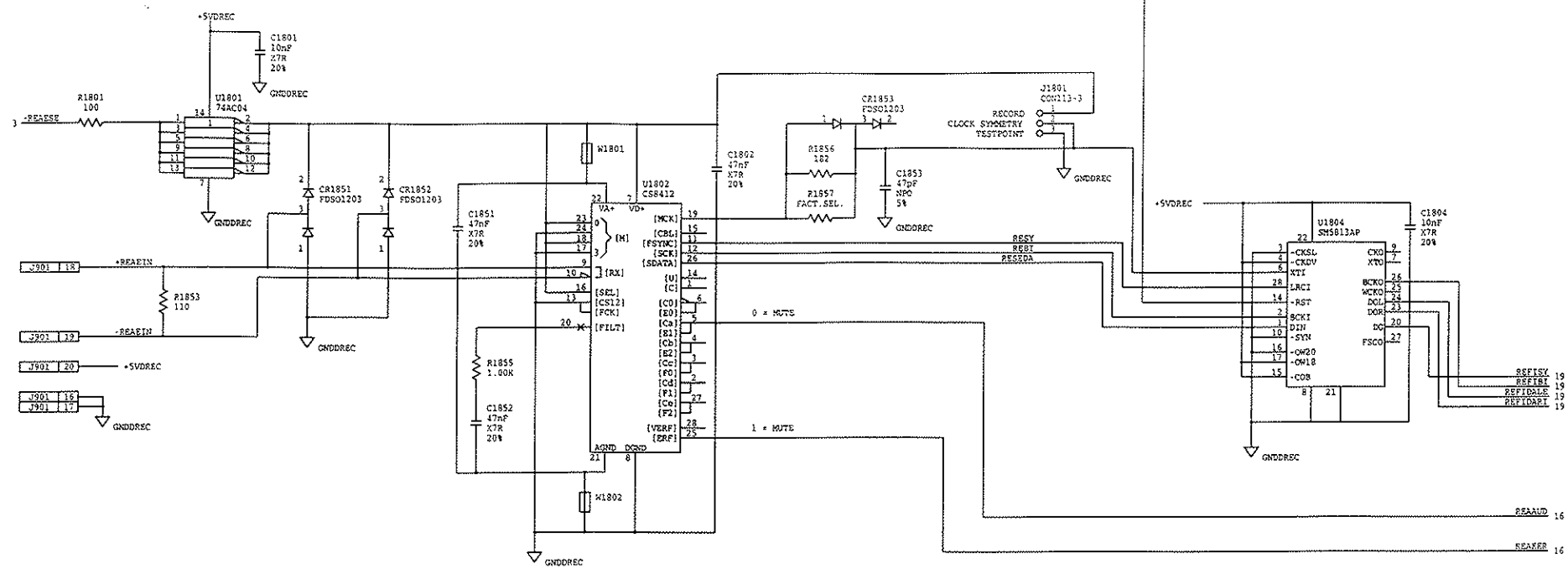
ROFISV  
16 ROFIB1  
16 ROFIOALE  
16 ROFIDART



+5V3C 10 mA  
+5V3C 50 mA  
+15V3C 10 mA  
+15V3C 10 mA

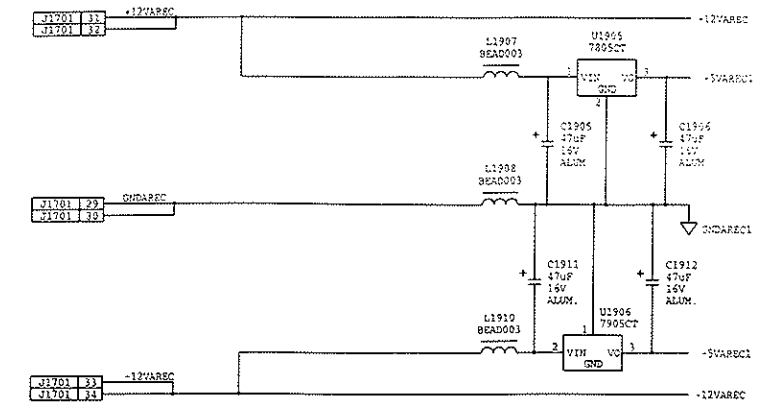
REV	RELS	CLASSÉ AUDIO INC.	
1		TITLE	
		GENSSP1 REMOTE AUDIO DAC	
		DRAWING NO.	SHEET 17 OF 20
		GENSSP1/DSCH	

16 RECEN1

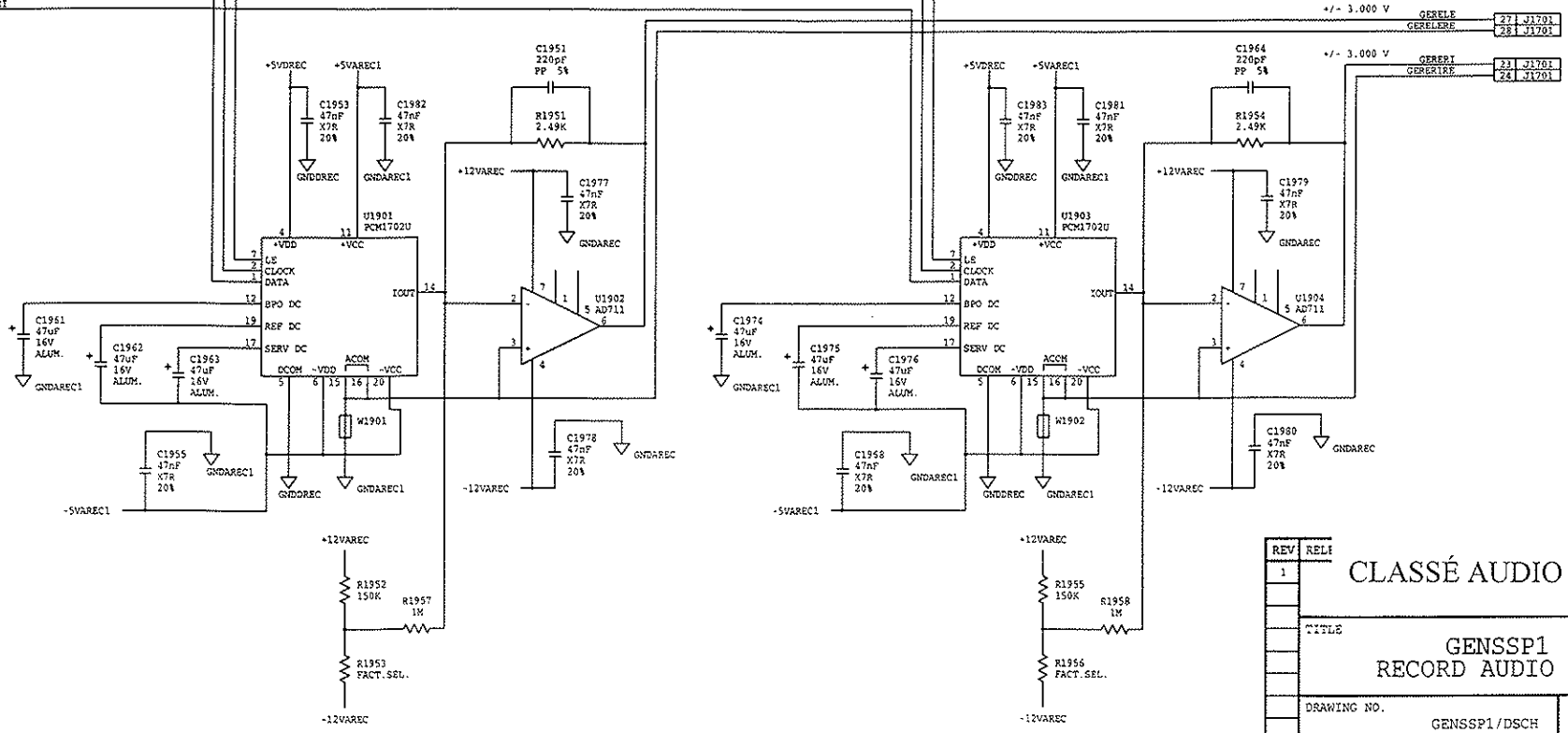
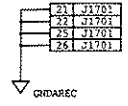


\*SVCA 45 1A  
\*SV4B 45 2A

REV	REL	CLASSÉ AUDIO INC.	
1		TITLE GENSSP1 RECORD AUDIO RECEIVER	
		DRAWING NO. GENSSP1/DSCH	SHEET 19 OF 20

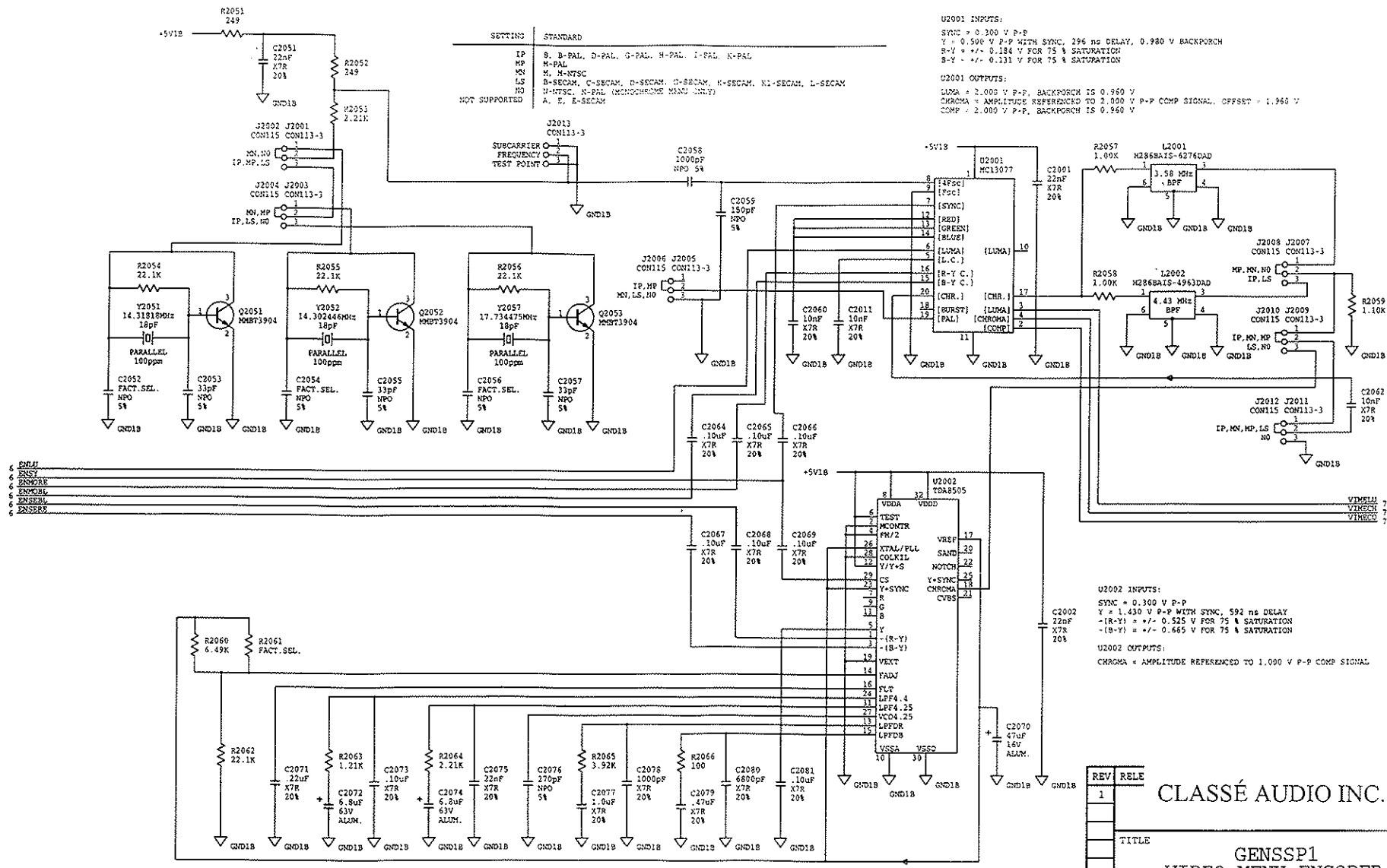


19 REF15V  
19 REF10V  
19 REF15V  
19 REF10V



+5V3C 10 mA  
-5V3C 50 mA  
+15V3C 10 mA  
-15V3C 10 mA

REV	RELI	CLASSÉ AUDIO INC.	
1		TITLE	
		GENSSP1 RECORD AUDIO DAC	
		DRAWING NO.	SHEET 19 OF 20
		GENSSP1/DSCH	



SETTING	STANDARD
IP	B, B-PAL, D-PAL, G-PAL, H-PAL, I-PAL, N-PAL
MP	M-PAL
MS	M, M-NTSC
LS	B-SECAM, C-SECAM, D-SECAM, G-SECAM, N-SECAM, N1-SECAM, L-SECAM
HO	M-NTSC, N-PAL (MONOCHROME MENU ONLY)
NOT SUPPORTED	A, E, E-SECAM

U2001 INPUTS:  
 SYNC = 0.300 V P-P  
 Y = 0.500 V P-P WITH SYNC, 296 ns DELAY, 0.980 V BACKPORCH  
 R-Y = +/- 0.184 V FOR 75 % SATURATION  
 B-Y = +/- 0.131 V FOR 75 % SATURATION

U2001 OUTPUTS:  
 LUMA = 2.000 V P-P, BACKPORCH IS 0.950 V  
 CHROMA = AMPLITUDE REFERENCED TO 2.000 V P-P COMP SIGNAL, OFFSET = 1.960 V  
 COMP = 2.000 V P-P, BACKPORCH IS 0.950 V

U2002 INPUTS:  
 SYNC = 0.300 V P-P  
 Y = 1.430 V P-P WITH SYNC, 592 ns DELAY  
 -R-Y = +/- 0.525 V FOR 75 % SATURATION  
 -B-Y = +/- 0.665 V FOR 75 % SATURATION

U2002 OUTPUTS:  
 CHROMA = AMPLITUDE REFERENCED TO 1.000 V P-P COMP SIGNAL

REV	RELE
1	

TITLE

GENSSP1  
VIDEO MENU ENCODER

DRAWING NO. GENSSP1/DSCH SHEET 20 OF 20

## Details on the new SSP-50 EPROM version 1.43

An improvement has been added to the SSP-50 and we are sending out new EPROMs to all our dealers so you can make a change in your demo processors and upgrade your customers' processors. The changes, outlined below, make using the SSP-50 even easier.

The software fully implements the surround mode **autodetect** feature. The functions have been added to the **audio section** of the 'on screen menu'

- Auto detect of DTS/Dolby Digital.
- Auto detect of Pro-Logic.

If a **Dolby Digital** or **DTS encoded signal** is **detected** and if the **Dolby Digital/DTS auto detect function is enabled (ON)**, the SSP-50 will **automatically switch** to the proper surround mode no matter what the currently selected mode is. If a **Dolby Digital or DTS encoded signal** is **detected** and the **Dolby Digital/DTS autodetect function is disabled (OFF)** and the SSP-50 is **not currently set to the detected mode**, the audio output will **mute** until the proper mode is user selected.

If a **2/0 (2 channel) encoded Dolby Digital signal** is **detected** and if the **Dolby Pro Logic autodetect function is enabled (ON)**, the SSP-50 will **automatically turn on Dolby Pro Logic** post processing and **generate the center and surround channels**. If the **Dolby Digital signal is not 2/0 encoded**, the SSP-50 will **not allow Dolby Pro Logic to become active**. **Dolby Pro Logic** may be **turned on** with an analog input **manually**. When **Dolby Pro Logic is active** with a **Dolby Digital input signal**, the mixed mode menu will **briefly display Dolby Pro Logic + Dolby Digital**. **The lower alphanumerical display will show Dolby Pro Logic**. *(Please remember there is no specific LFE in Dolby Pro Logic; subwoofer output depends on how you have defined the size of the system speakers).*

The software implements the dynamic range compression switch (sometime called "night mode"), required for Dolby licensing. The function has been added to the audio menu section of the on screen menu.

## Details on the SSP-50 EPROM version 1.52

The software fully implements the surround mode **autodetect** feature. The functions have been added to the audio section of the '**on screen menu**'

- Auto detect of Pro-Logic.
- Auto detect of DTS/Dolby Digital.

If a **Dolby Digital** or **DTS encoded signal** is **detected** and if the **Dolby Digital/DTS auto detect function is enabled (ON)**, the SSP-50 will **automatically switch** to the proper surround mode no matter what the currently selected mode is. If a **Dolby Digital** or **DTS encoded signal** is **detected** and the **Dolby Digital/DTS autodetect function is disabled (OFF)** and the SSP-50 is **currently set to an improper mode**, the audio output will **mute**.

If a **2/0 encoded Dolby Digital signal** is **detected** and if the **Dolby Pro Logic autodetect function is enabled (ON)**, the SSP-50 will **automatically turn on Dolby Pro Logic** post processing and **generate the center and surround channels**. If the **Dolby Digital signal** is **not 2/0 encoded**, the SSP-50 will **not allow Dolby Pro Logic to become active**. **Dolby Pro Logic** may be turned on with an analog input **manually**. When **Dolby Pro Logic** is active with a **Dolby Digital input signal**, the mixed mode menu will **briefly display Dolby Pro Logic + Dolby Digital**. The lower alphanumeric display will show **Dolby Pro Logic**.

The software implements the dynamic range compression switch required for Dolby licensing. The function has been added to the audio menu section of the on screen menu.

## EPRM version 1.52 replacement in the SSP-50

- 1- Turn off the unit, disconnect the other components from the unit and **remove the AC cord completely from the unit.**
- 2- Remove the screws securing the top cover.
- 3- The EPRM to replace is located on the top main board, on the front, to the right, parallel to the faceplate, near the ribbon connector going to the volume control, **location U105** (see drawing page 2).
- 4- **Before you remove and replace the EPRM, you have to make sure that you are grounded with a grounding bracelet. Avoiding to do so can destroy the EPRM. If you do not have access to a grounding bracelet, you can put your hand on a TV screen which has been powered up before touching the EPRMS, this will also prevent static discharge to the EPRM.**
- 5- Remove the old EPRM by gently prying it with a small flat screwdriver at both ends, **be careful not to touch any metal pins.**
- 6- Once the old EPRM has been removed, install the new EPRM. **Make sure that all the pins are perfectly aligned and making full contact into the socket.** Make sure that the new EPRM is aligned with the bottom of the digits parallel to the faceplate and the small notch also facing the same way as the printed notch on the main board.
- 7- Re-install the top cover, and reconnect the unit to the system, the screen and the AC line.
- 8- Power up the unit.
- 9- Go to the **main menu** and **recall factory default.**

(Go to **main menu**, go to **memory**, go to **factory default** and **press >**).

- 10- Note the warning on the screen that **'all present state settings will be overwritten with the factory default settings but user memory and installation setup will be unaffected'**.
- 11- Press **continue** and then press **enter.**

**NOTE: You will then need to recalibrate the speaker settings and linking of the inputs. If you avoid to do so, you will still have in memory the old setting from the old EPRM and the unit will not perform correctly.**

**IMPORTANT NOTE: MAKE SURE TO CLEAR ALL 10 USERS MEMORY BY INSTALLING FACTORY DEFAULT IN THEM, OTHERWISE UNIT WILL NOT FUNCTION CORRECTLY.**