



**SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTAÇÃO TECNICA**

THOMSON

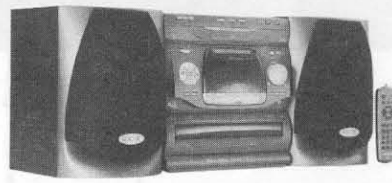
**ALTIMA 260
ALTIMA 360
ALTIMA 460**

Version (PC*) : A

*PC : The version code is indicated either in the battery compartment or on the back of the unit - Ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC : Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - Il codice della versione è indicato nello scompartimento delle batterie o sul retro dell'apparecchio - El código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.



ALTIMA 260



ALTIMA 360/ALTIMA 460

**Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Características del aparato**

Type of set : Type d'appareil : Geräteart : Tipo de aparato : Tipo d'apparecchio :	Two-in-one horizontal, combination Hifi/CD Ensemble compact stéréophonique Hifi/CD 2er Horizontal Kompaktanlage Hifi/CD Equipo compacto estereofónico Hifi/CD Insieme compatto stereofonico Hifi/CD	
Power supply : Alimentation : Stromversorgung : Alimentazione : Alimentación :	230 V ~ 50 Hz	Nominal output power : Puissance nominale de sortie : Nennausgangsleistung : Potenza nominale di uscita : Potencia nominal de salida :
Signal to noise ratio : Rapport signal / bruit : Geräuschspannungsabstand : Relación señal / ruido : Rapporto segnale / disturbo :	55 dB	Sensitivity : Sensibilité : FM - MF : Empfindlichkeit : MW - PO : Sensibilità : LW - GO : Sensibilidad :
Frequency response : Courbe de réponse : Frequenzgang : Curva di risposta : Curva de respuesta :	125 Hz - 10 kHz (-5 dB)	Signal to noise ratio : Rapport signal / bruit : Geräuschspannungsabstand : Rapporto segnale / disturbo : Relación señal / ruido :
Wow and flutter : Fluctuations : Gleichlauf : Fluttuazioni : Fluctuaciones :	0,25 %	4,76 cm/S C60 : 170 S
DAD Disc rotation speed : Vitesse de rotation du disque : CD-Drehgeschwindigkeit : Velocità di rotazione del disco : Velocidad de rotación del disco :	200 → 500 tr/m	Frequency response : Courbe de réponse : Frequenzgang : Curva di risposta : Curva de respuesta :
Total harmonic distortion : Distorsion harmonique : Klirrfaktor : Distorsione armonica : Distorsión armónica :	0,5 %	Signal to noise ratio : Rapport signal / bruit : Geräuschspannungsabstand : Rapporto segnale / disturbo : Relación señal / ruido :



WARNING : Before servicing this set read the safety recommendations.
ATTENTION : Avant toute intervention sur cet appareil, lire les recommandations de sécurité.
ACHTUNG : Bei jedem Eingriff in das Gerät, die Sicherheitsvorschriften beachten.
ATTENZIONE : Prima di intervenire sull'apparecchio, leggere le norme di sicurezza.
IMPORTANTE : Antes de cualquier intervención, leer las recomendaciones de seguridad.



CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
APARATO CON LASER DE CLASE 1
APPARECCHIO CON LASER DI CLASSE 1

DANGER :

Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

ATTENTION :

Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.

VORSICHT BEI REPARATUREN :

Bei geöffneter Schublade und Defekt der Sicherheitsvorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.

ATTENZIONE :

Il raggio laser è invisibile. Evitare l'esposizione diretta durante la manutenzione.

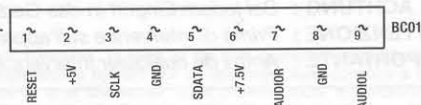
IMPORTANTE :

El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.

**DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL
- SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE -
ESQUEMA DEL TRATAMIENTO DIGITAL**

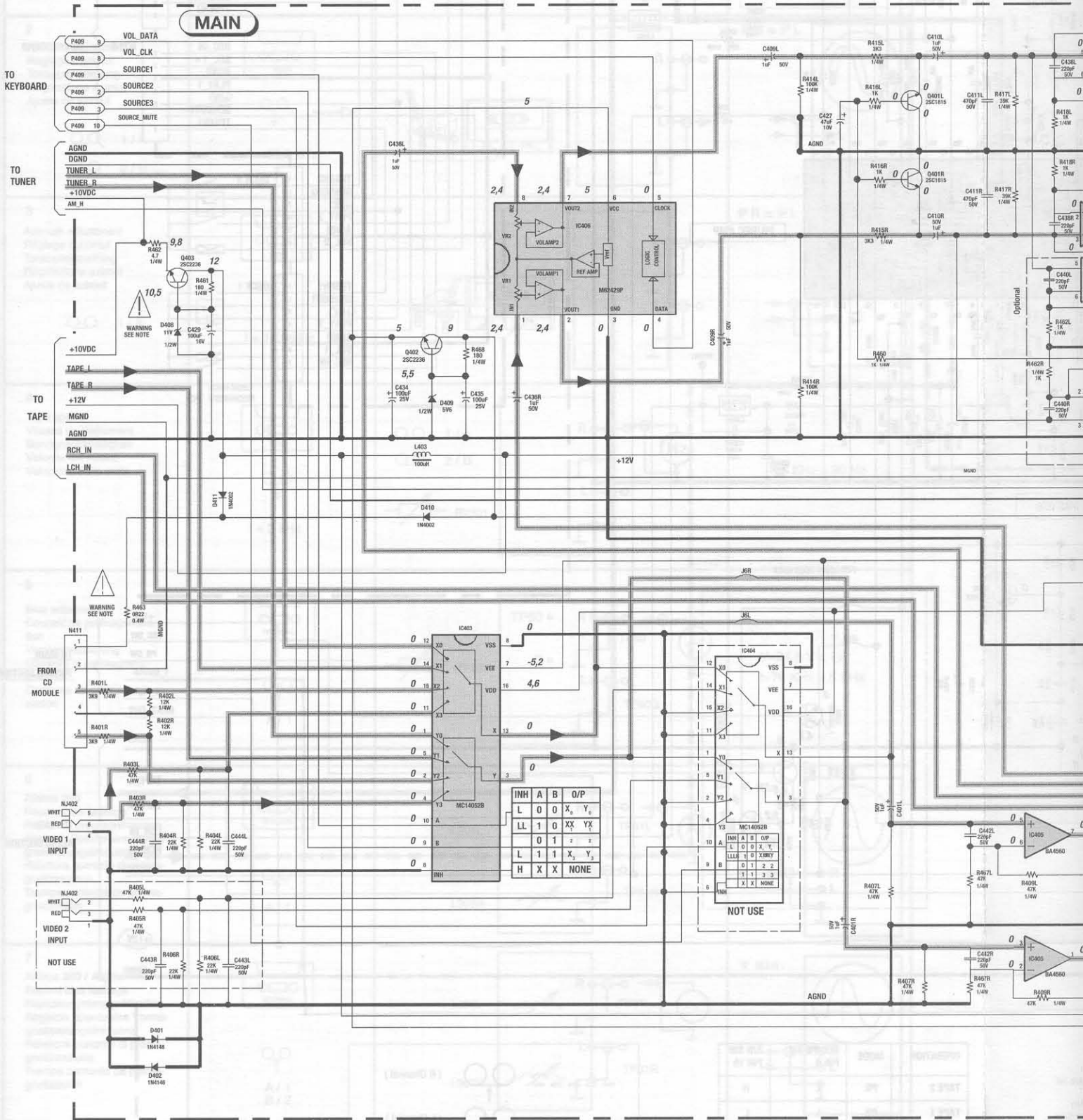
The complete Digital Processing Module is available from A. S. S. under Part Number :
En SAV, l'ensemble du module traitement digital est géré sous le code :
Die Service Bestell-Nr. für das Modul "Digital Processing kompl." ist :
Il codice del modulo completo di elaborazione digitale è :
En postventa, el modulo completo tratamiento digital lleva el código :

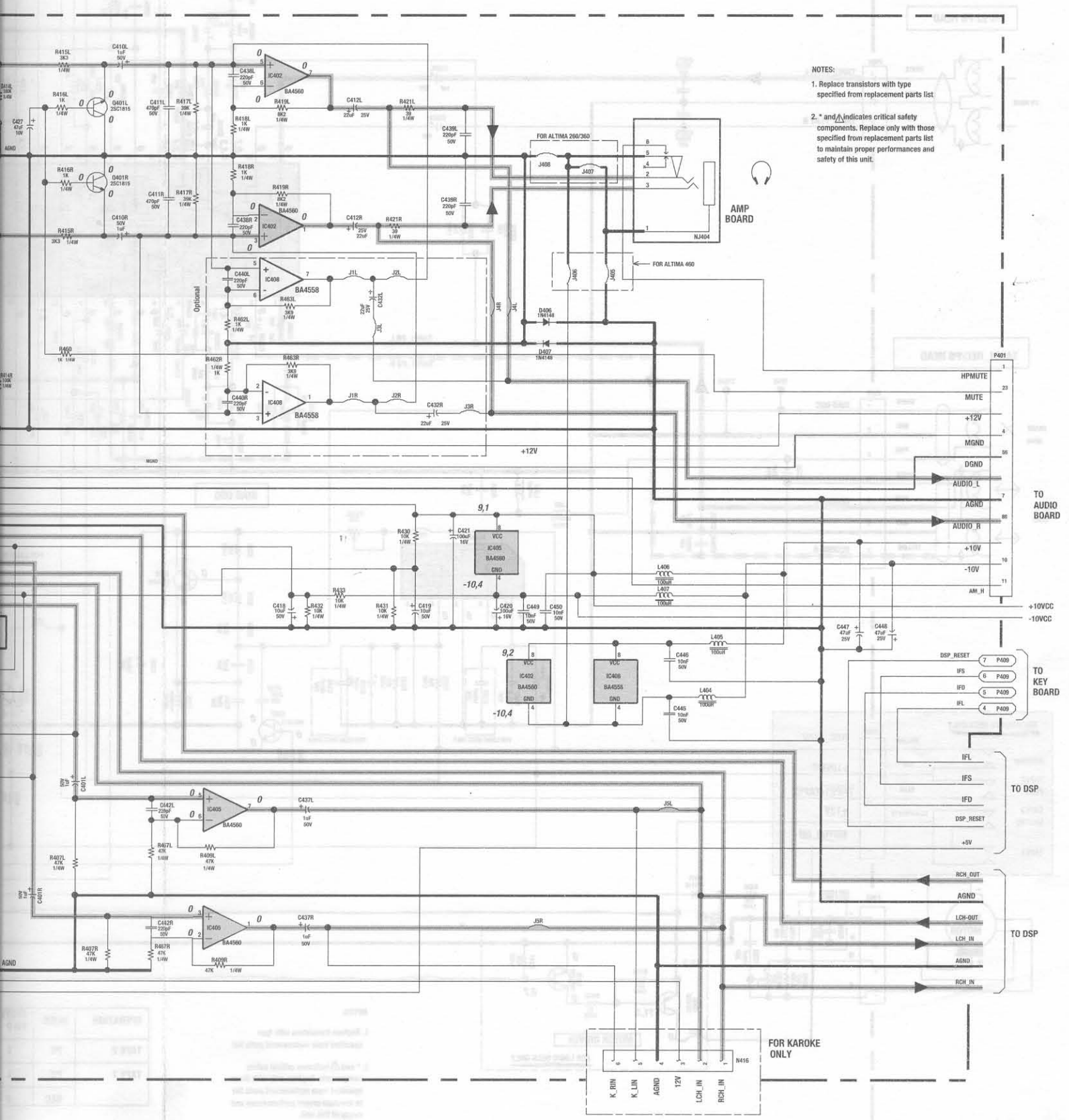
105 428 80



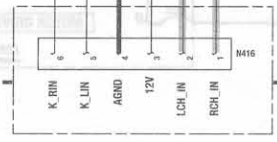
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD

(AUDIO PART)



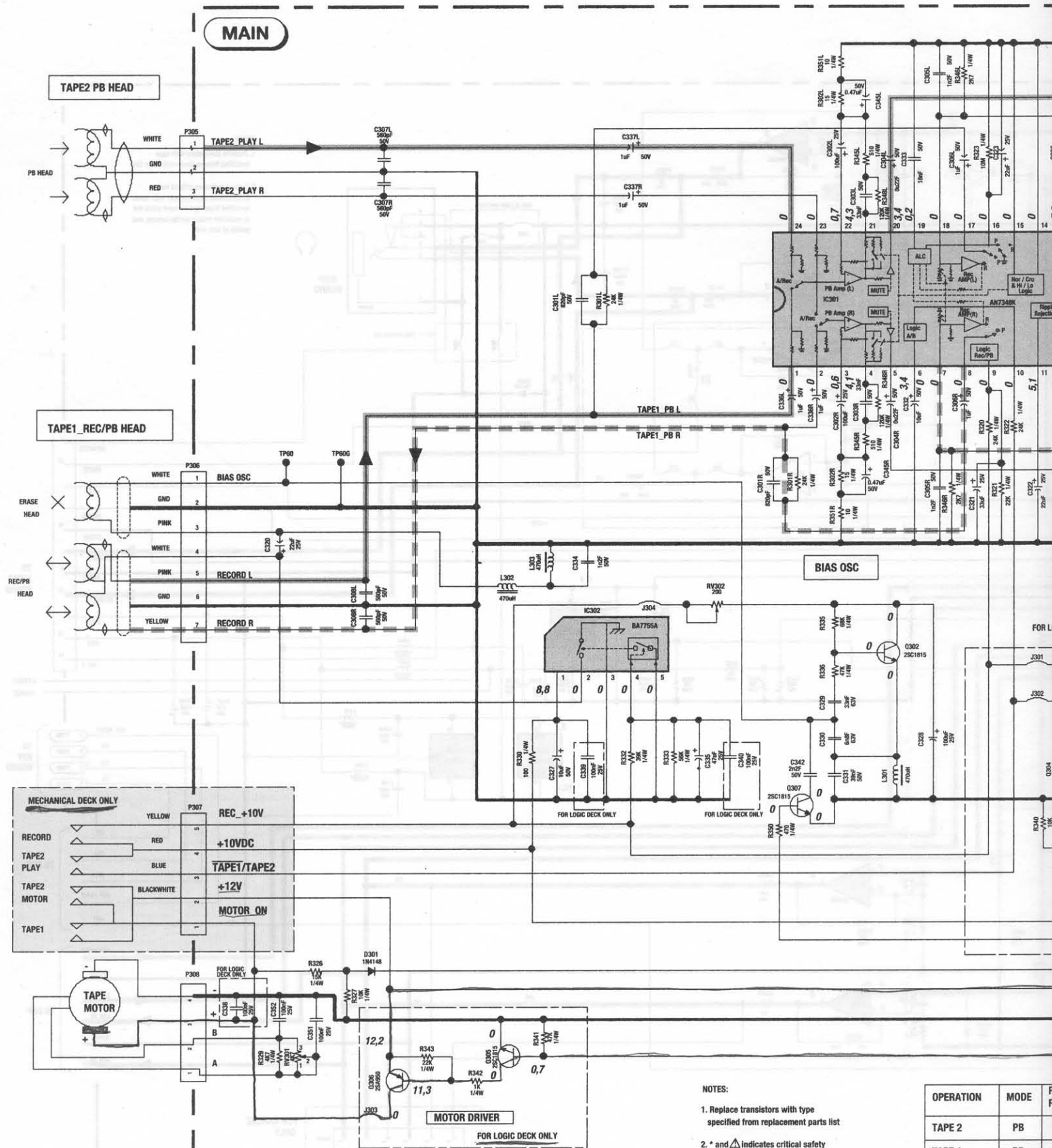


- NOTES:
1. Replace transistors with type specified from replacement parts list
 2. * and Δ indicates critical safety components. Replace only with those specified from replacement parts list to maintain proper performances and safety of this unit.



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD

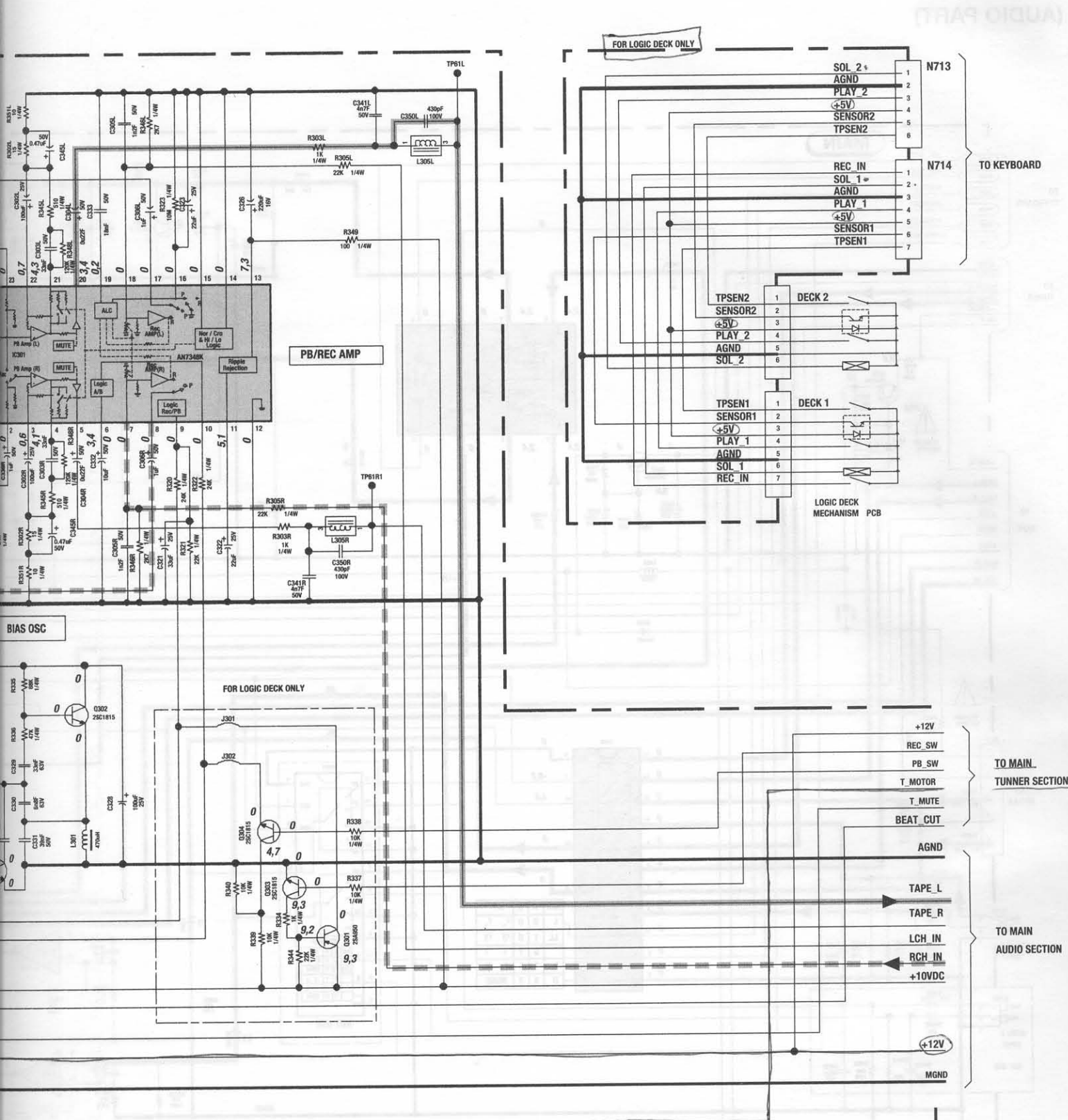
(TAPE PART)



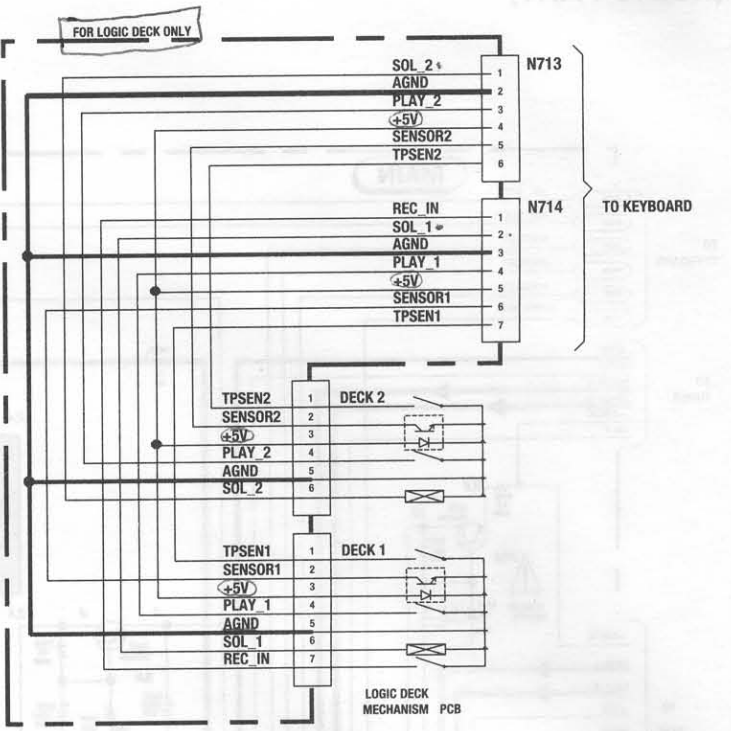
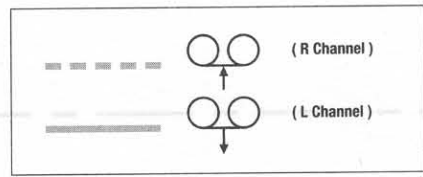
- NOTES:
1. Replace transistors with type specified from replacement parts list
 2. * and Δ indicates critical safety components. Replace only with those specified from replacement parts list to maintain proper performances and safety of this unit.

OPERATION	MODE	F
TAPE 2	PB	
TAPE 1	PB	
	REC	

PLATTE SCHALTBILD - SCHEMA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



OPERATION	MODE	REC/PB SW PIN 9	A/B SW PIN 10
TAPE 2	PB	L	H
TAPE 1	PB	L	L
	REC	H	L









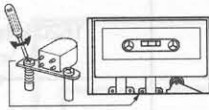
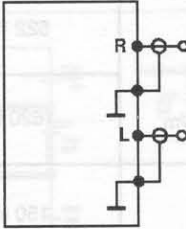
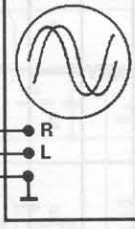



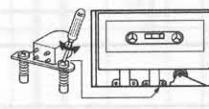
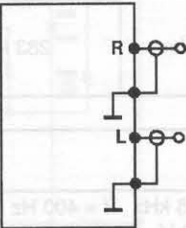

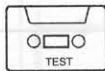




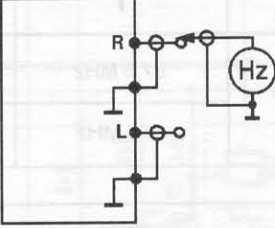



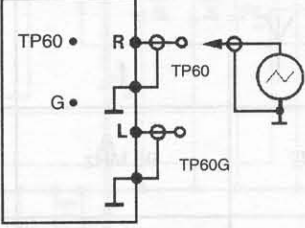




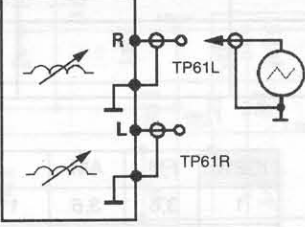
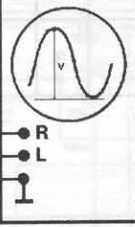




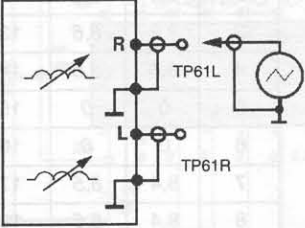
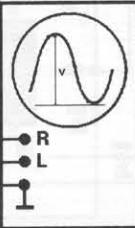


TO MAIN TUNNER SECTION

TO MAIN AUDIO SECTION

+12V
MGND

parts list
with those
parts list
ances and

ADJUSTMENTS	REGLAGES	EINSTELLUNGEN	REGOLAZIONE	AJUSTES
1 Tape tension Tension de bande Bandzug Tensione del nastro Tensión de la cinta	 DYNAMOMETER			 $40 \text{ g/cm} < M < 60 \text{ g/cm}$   $80 \text{ g/cm} < M < 150 \text{ g/cm}$
2 Azimuth adjustment Réglage d'azimut Tonkopfeinstellung Regolazione azimut Ajuste de azimut  1/A  2/B	 TEST  → $f = 12,5 \text{ kHz}$			$\varnothing R = \varnothing L$ 
3 Azimuth adjustment Réglage d'azimut Tonkopfeinstellung Regolazione azimut Ajuste de azimut  1/A	 TEST  ← $f = 12,5 \text{ kHz}$			$\varnothing R = \varnothing L$ 
4 Tape speed Vitesse de défilement Bandgeschwindigkeit Velocità del nastro Velocidad de la cinta	 TEST  $f = 3 \text{ kHz}$	 1/A  2/B  RV301		$f = 3 \text{ kHz} \pm 90 \text{ Hz}$
5 Bias adjtment Courant de prémagnétisation Vormagnetisierung Corrente di premagnetizzazione Corriente de premagnetización	 NORMAL  ↑ A/1	 RV302		$V = 24,5 \text{ V} \pm 1 \text{ V}$ $f = 76 \text{ KHz} \pm 5 \text{ KHz}$
6 Altima 260 Record bias leakage Réjecteur prémagnétisation Abgleich Sperrkreise Vormagnetisierungsfrequenz Reiettore corrente di premagnetizzazione Trampa corriente de premagnetización	 NORMAL  ↑ A/1	 L305L  L305R		$v \text{ Min.}$ 
7 Altima 360 / Altima 460 Record bias leakage Réjecteur prémagnétisation Abgleich Sperrkreise Vormagnetisierungsfrequenz Reiettore corrente di premagnetizzazione Trampa corriente de premagnetización	 NORMAL  ↑ A/1 B/2	 L305L  L305R		$v \text{ Min.}$ 

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

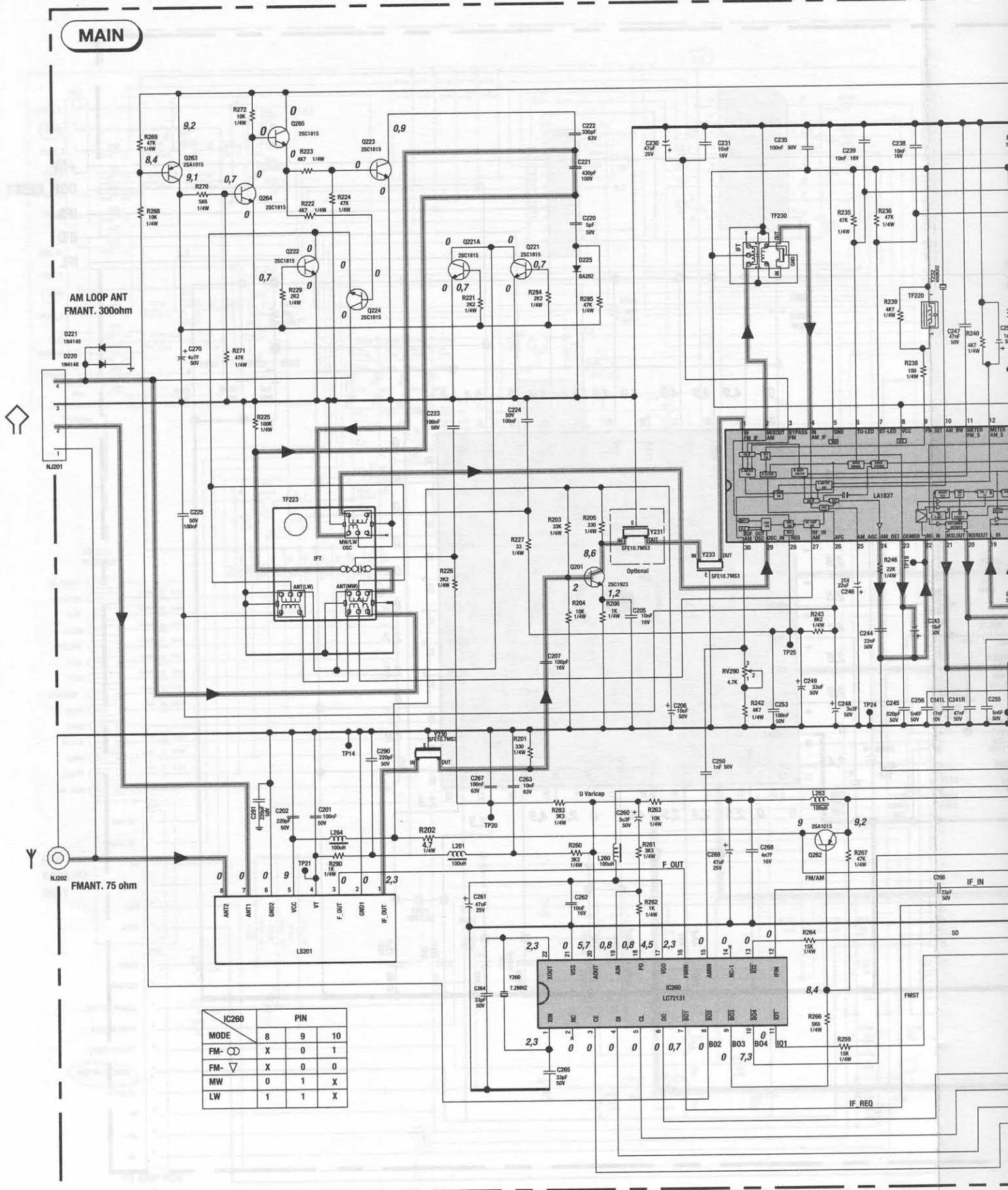
AM alignment					
Gf		f	18888 KHZ		
MW	1	Gf	522 kHz	522 kHz	TP20 V = 1,5 V ± 0,5V
	2	Ve > 1000 μV/m	1620 kHz	1620 kHz	TP20 V = 7,2 V ± 0,5V
LW	3	Gf	150 kHz	150 kHz	TP20 V = 1,2 V ± 0,4V
	4	Ve > 2500 μV/m	283 kHz	283 kHz	TP20 V = 6 V ± 0,5V

FM alignment					
Gf		f	18888 KHZ		
FM	1	Gf	87,5 MHz	87,5 MHz	V = 2V ± 0,5V
		10 μV	108 MHz	108 MHz	V = 7 V ± 0,6V

FM Auto stop alignment					
Gf		f	18888 KHZ		
	1	Ve = 45 μV	98 MHz	98 MHz	TP25 R243 IC210 (26) V = 0 V ± 0,2 V
	2	Ve = 20 μV	98 MHz	98 MHz	RV 290 IC210 (6) V = 0,6 V ± 0,2 V
	3			98,5 MHz	IC210 (6) V > 5V

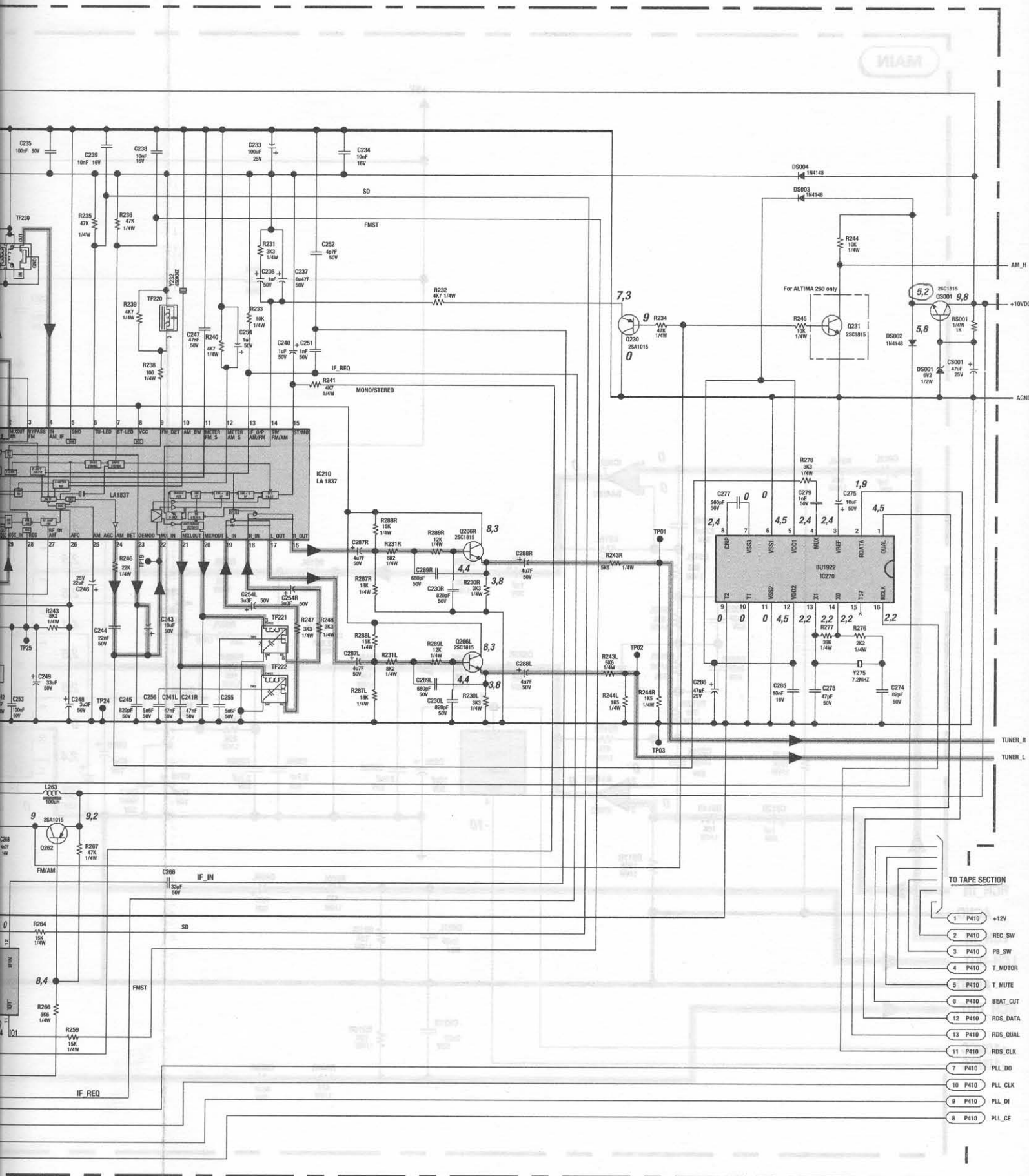
IC210	FM	AM		FM	AM		FM	AM
1	3,6	3,6	11	3,5	0	21	3,3	3,3
2	8,4	8,6	12	0	2,3	22	2,9	2,9
3	3,6	8,6	13	0,2	0,2	23	3,7	3
4	3,6	3,6	14	7,3	4,4	24	0	1,2
5	0	0	15	7,3	7,4	25	0	1,1
6	0	0	16	4,3	4,3	26	3,5	3,6
7	8,4	8,5	17	4,3	4,3	27	3,5	3,6
8	8,4	8,6	18	4,3	4,3	28	3,7	3,7
9	8,4	8,6	19	4,3	4,3	29	3,7	3,7
10	1,3	1,3	20	3,3	3,3	30	2,2	2

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD (TUNER PART)



RUNDPLATTE SCHALTBIKD - SCHEMA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL

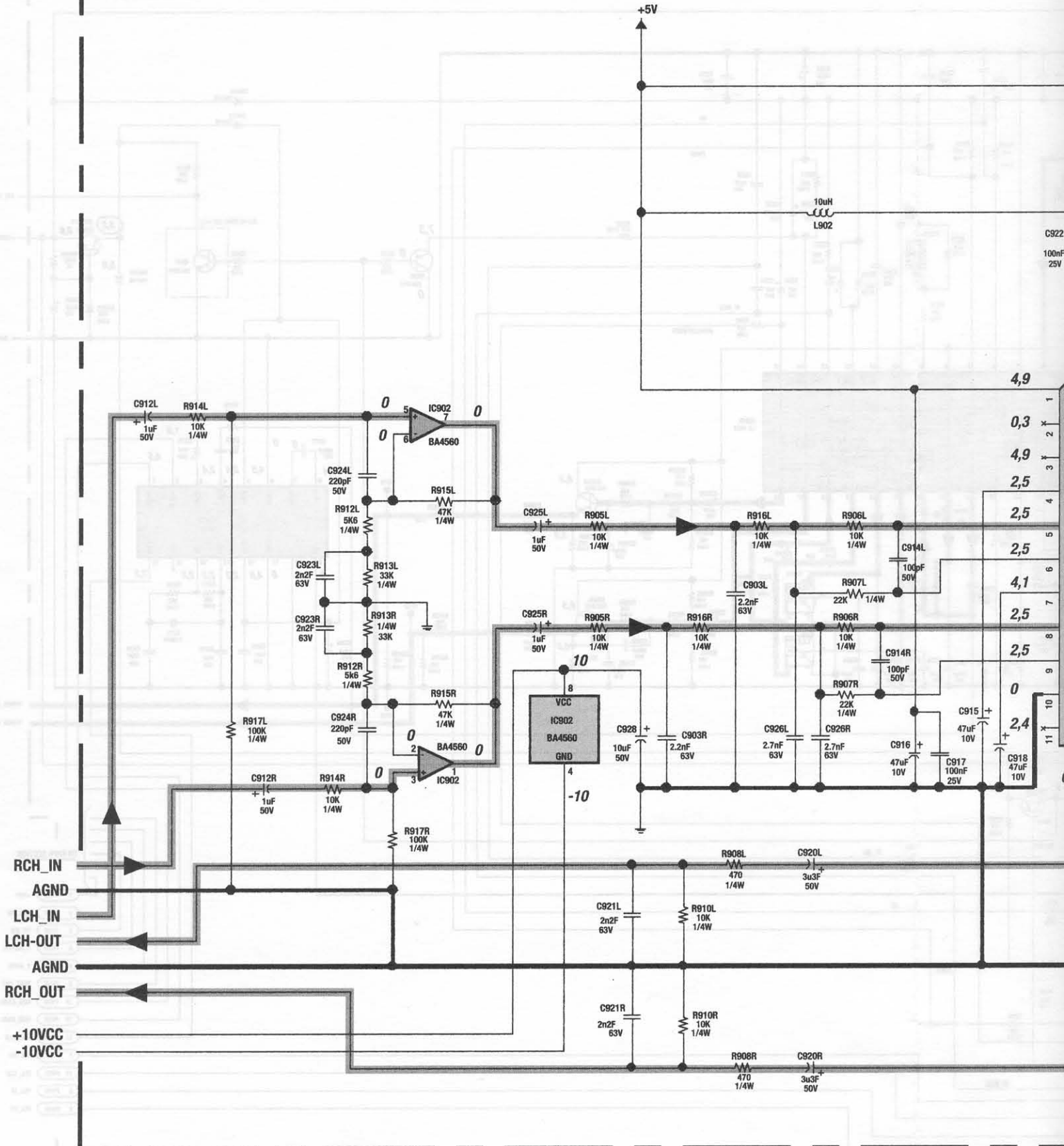
(DIGITAL SOUND PROCESSOR PART)



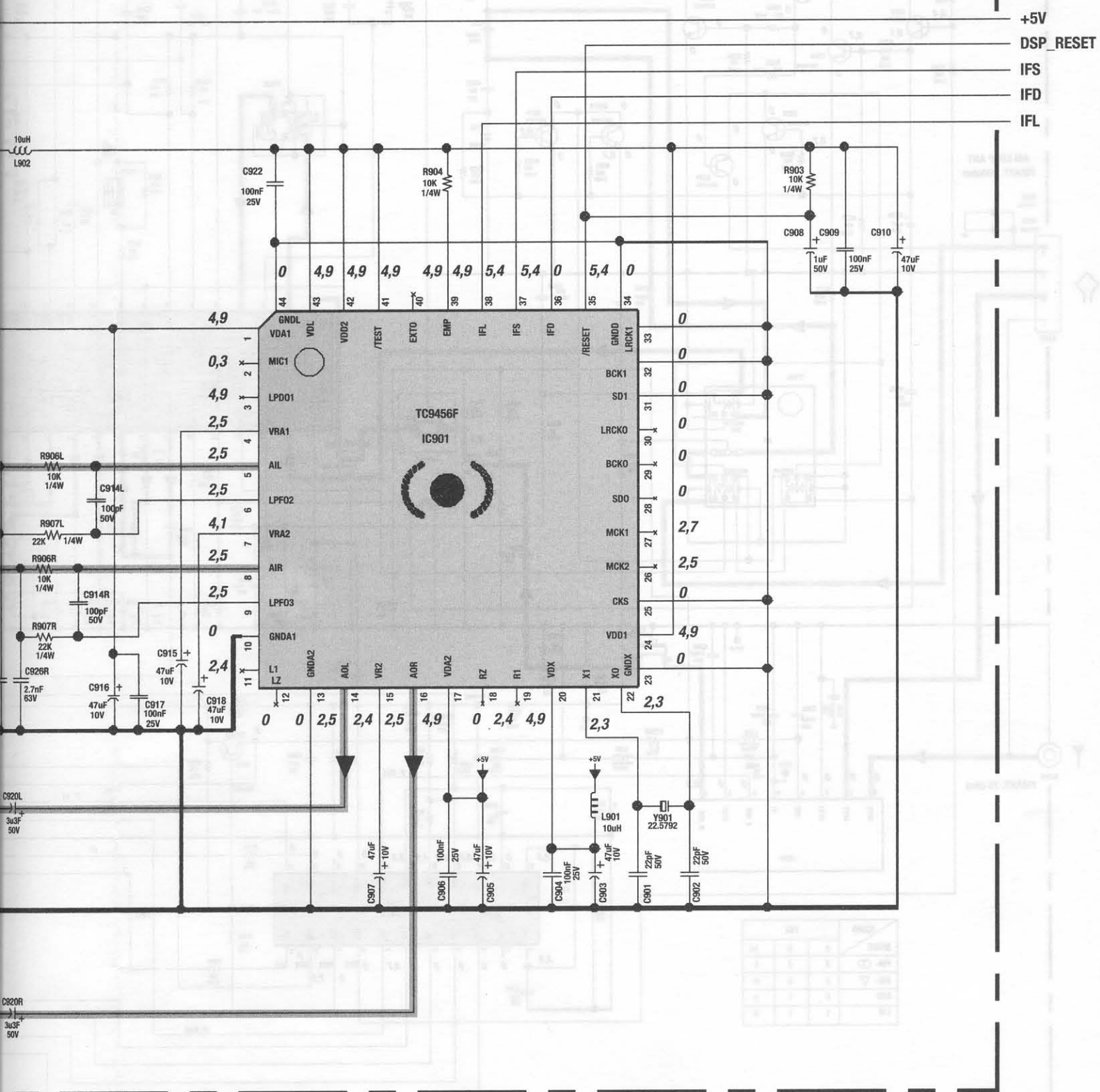
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD

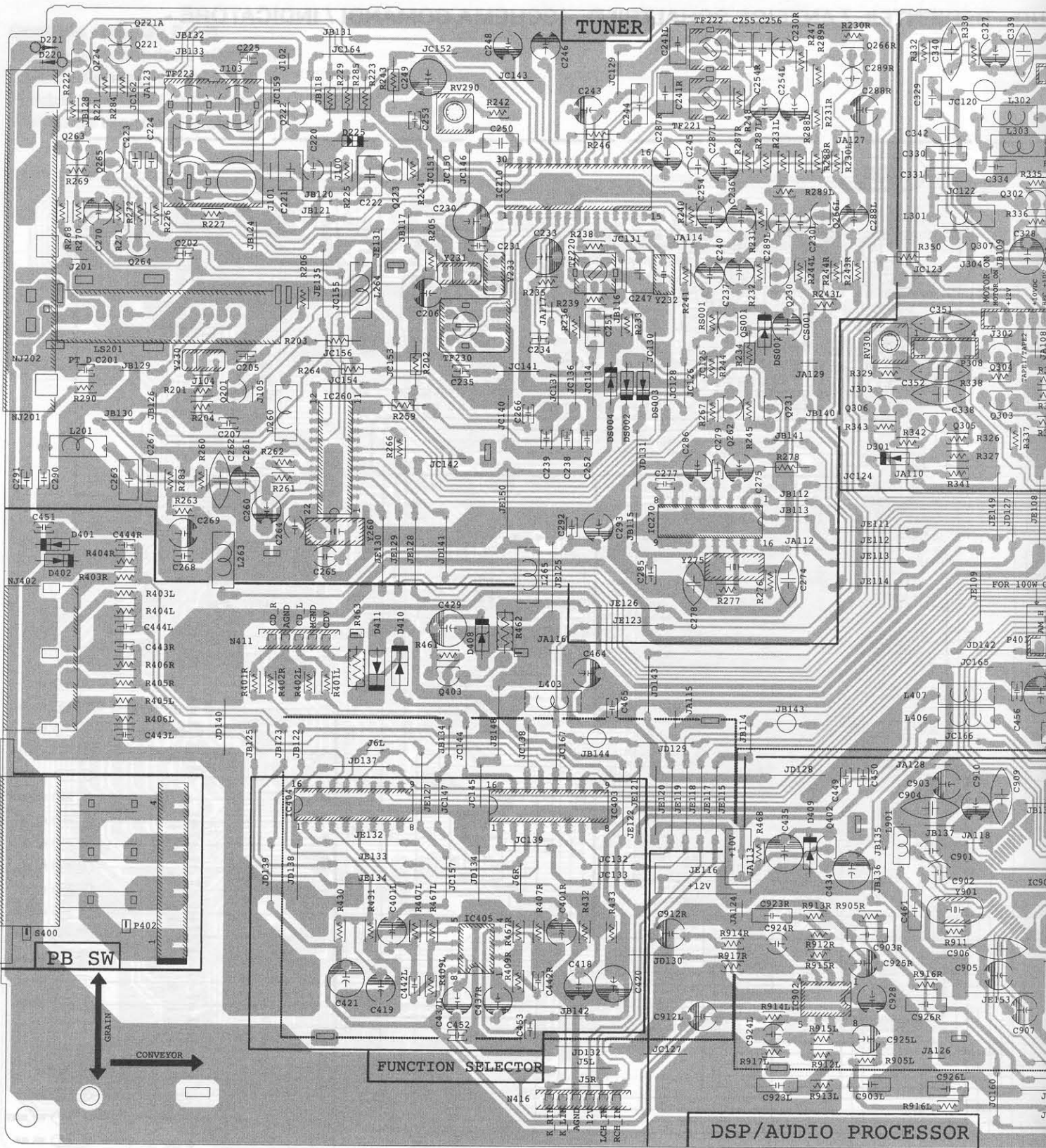
(DIGITAL SOUND PROCESSOR PART)

MAIN

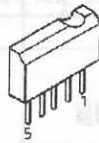


(TUNER PART)





Component side
 Côté composants
 Bestückungsseite
 Lato componenti
 Lado componentes



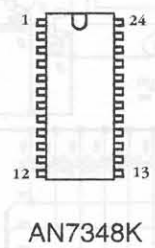
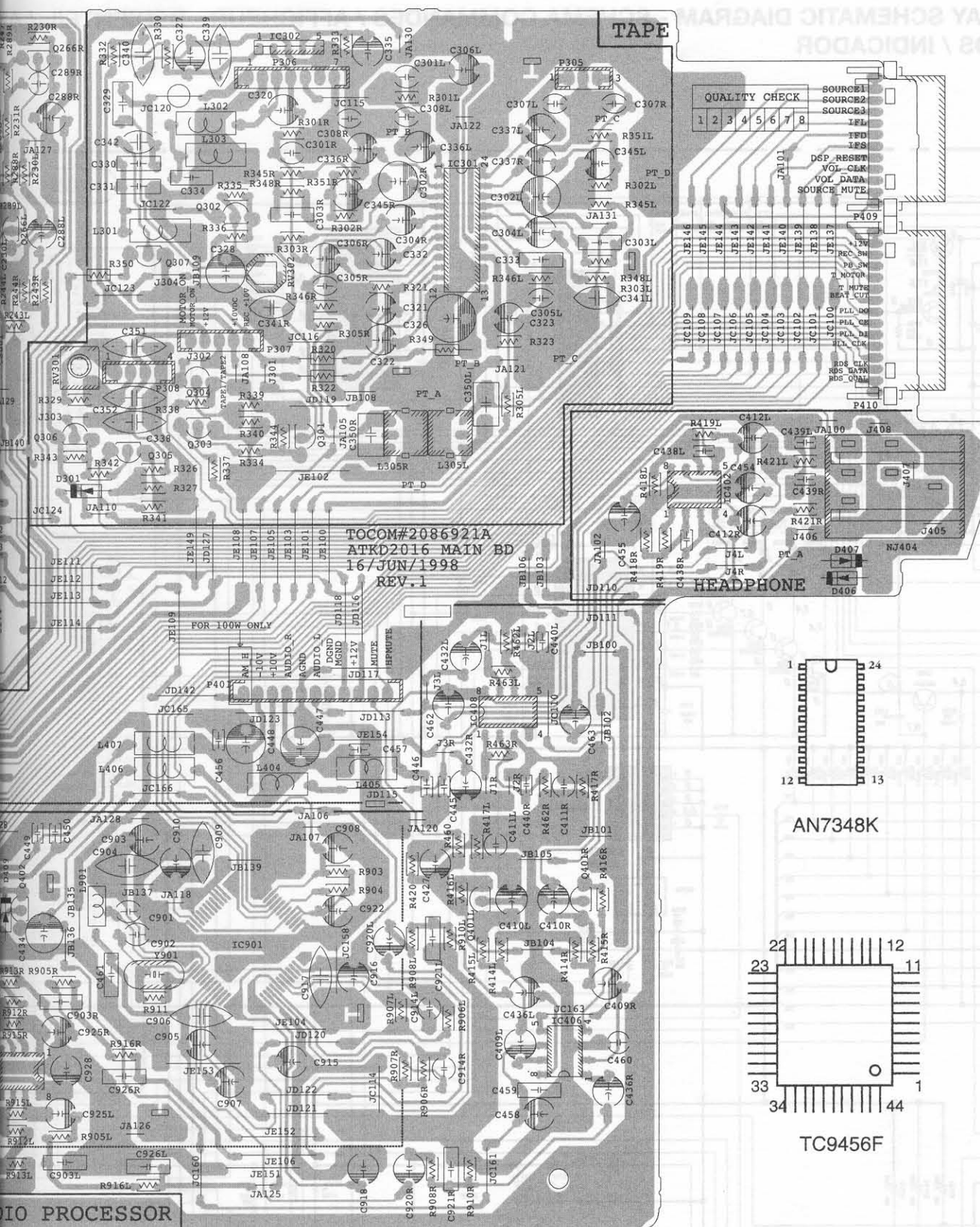
BA7755A



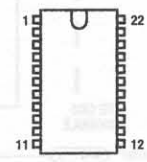
E C B

- 2SA1015
- 2SA950
- 2SC1815
- 2SC2120
- 2SC2236

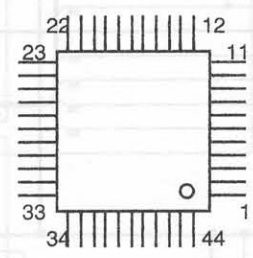
Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal



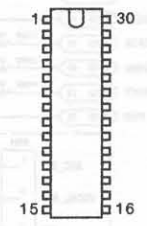
AN7348K



LC72131



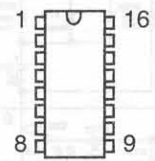
TC9456F



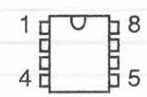
LA1837



- 2SA1015
- 2SA950
- 2SC1815
- 2SC2120
- 2SC2236

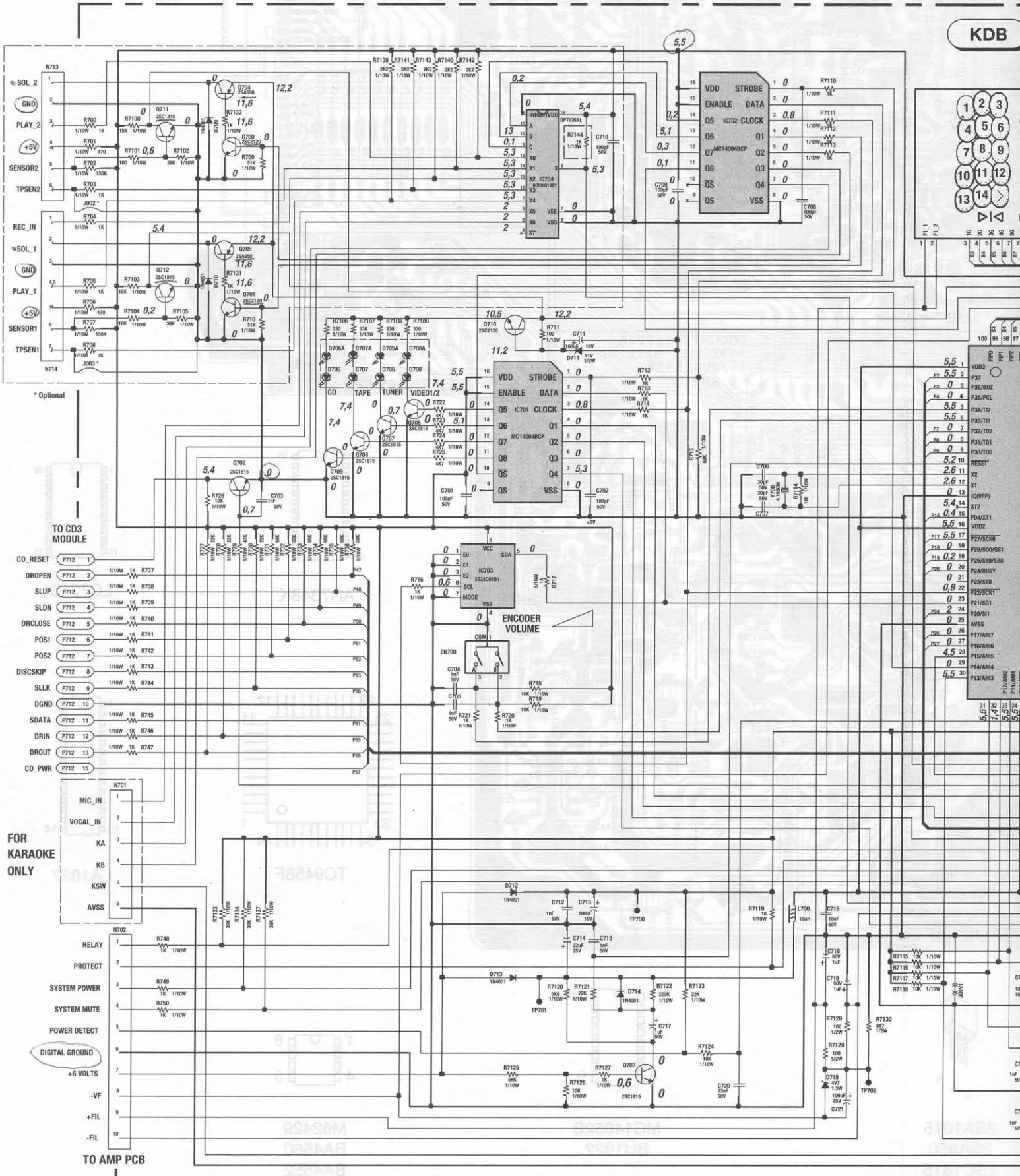


MC14052B
BU1922

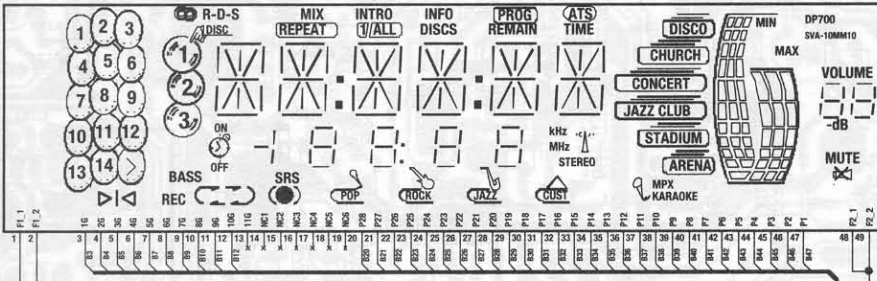


M62429
BA4560
BA4552

CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - BEDIENTEIL / ESQUEMA MANDOS / INDICADOR



KDB



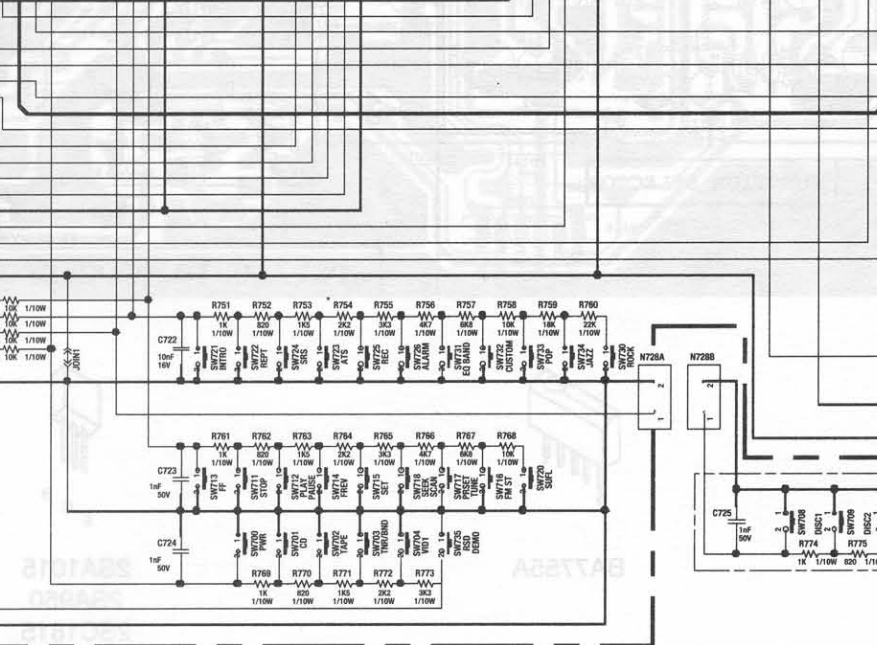
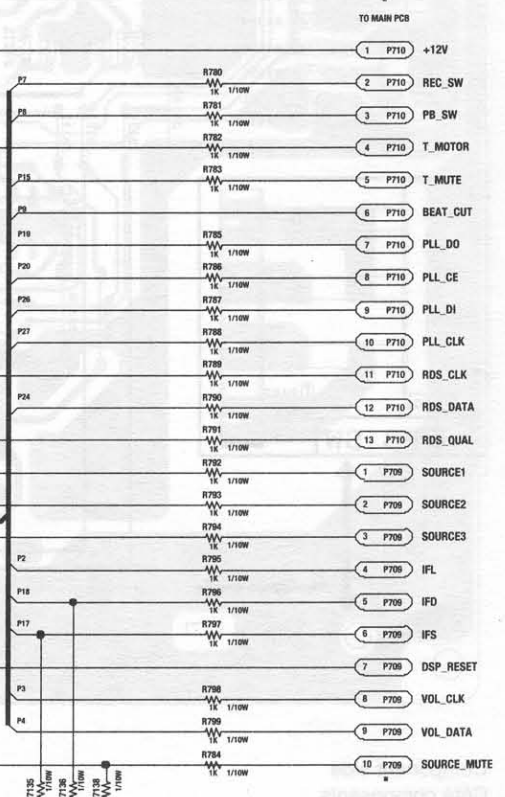
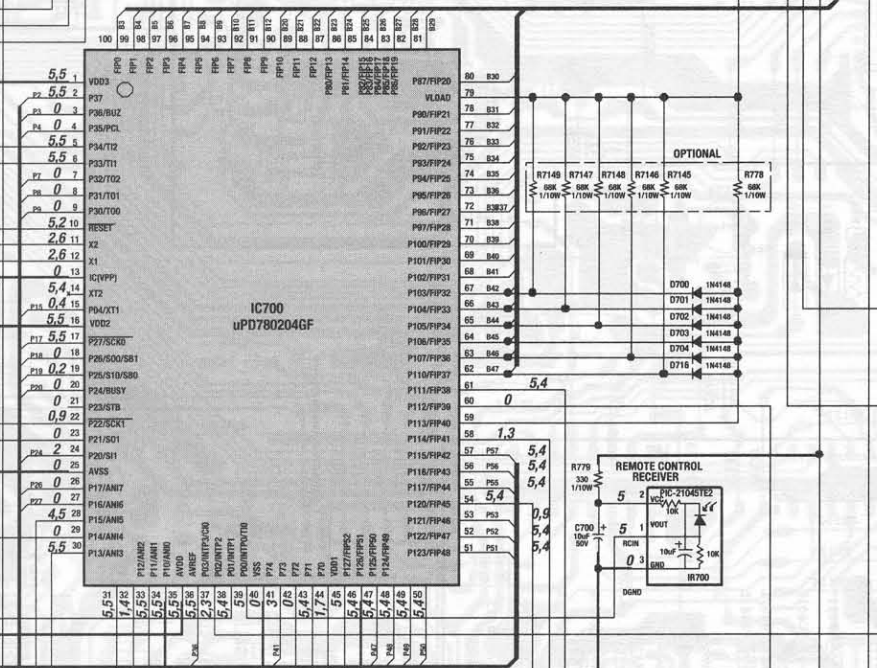
	D704	D716
MECH	-	-
LOGIC NO AR	•	•
LOGIC W AR	•	•

LOCATION	
VERSION	
EUR 2 BAND	•
EUR 3 BAND	-

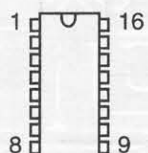
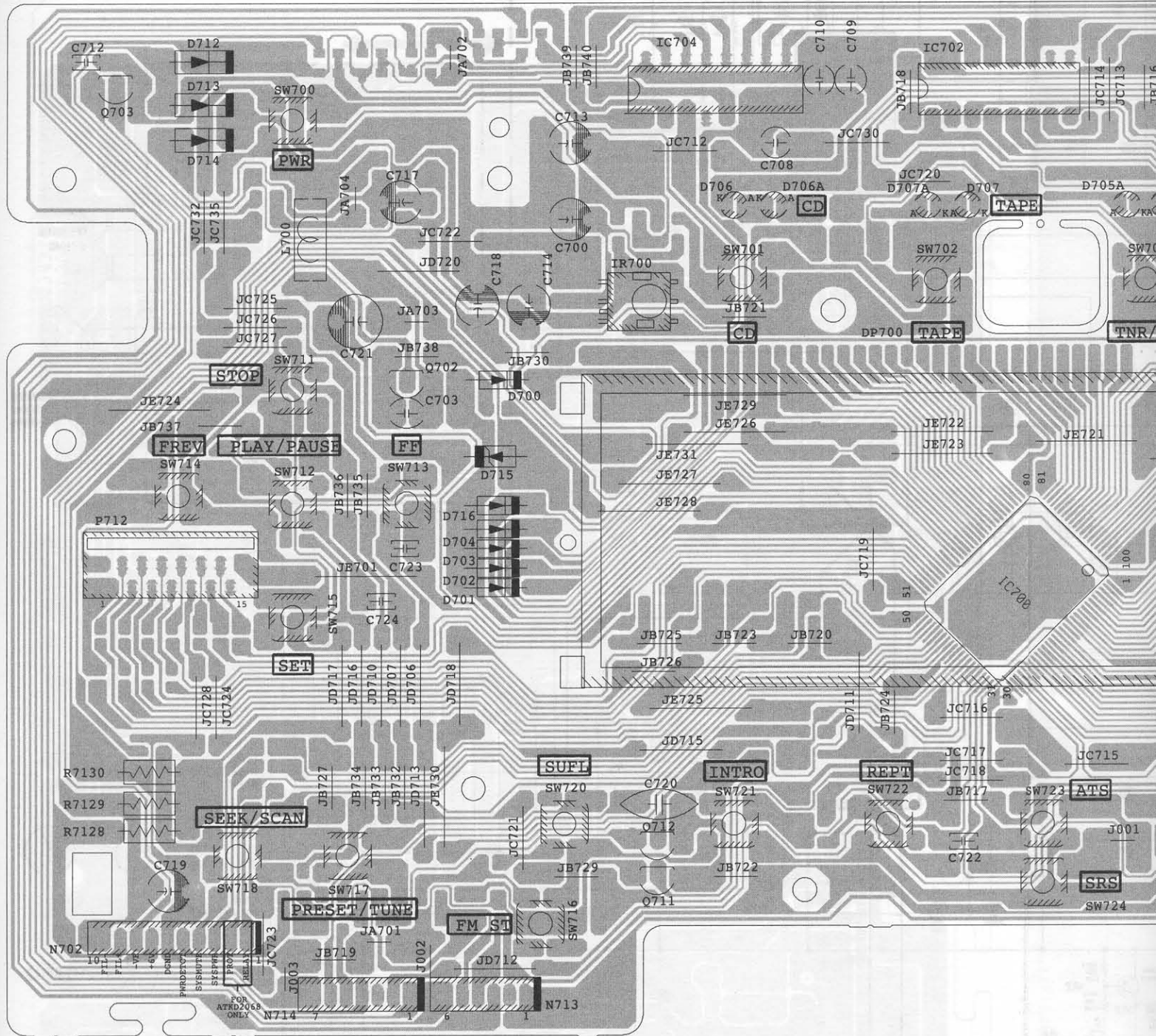
	D702	D703
ALTIMA 260	-	-
50W	-	•
ALTIMA 460	•	•
100W	•	•

	SW725
LOGIC	•
MECH	-

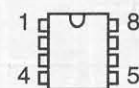
NOTE: • USED



Controls / display P.C.B.
 Platine commandes / afficheurs
 Ltpl. Bedienteil / Anzeige
 Piastra comandi / indicatori
 Platina de mandos / indicadores



MC14094BCP

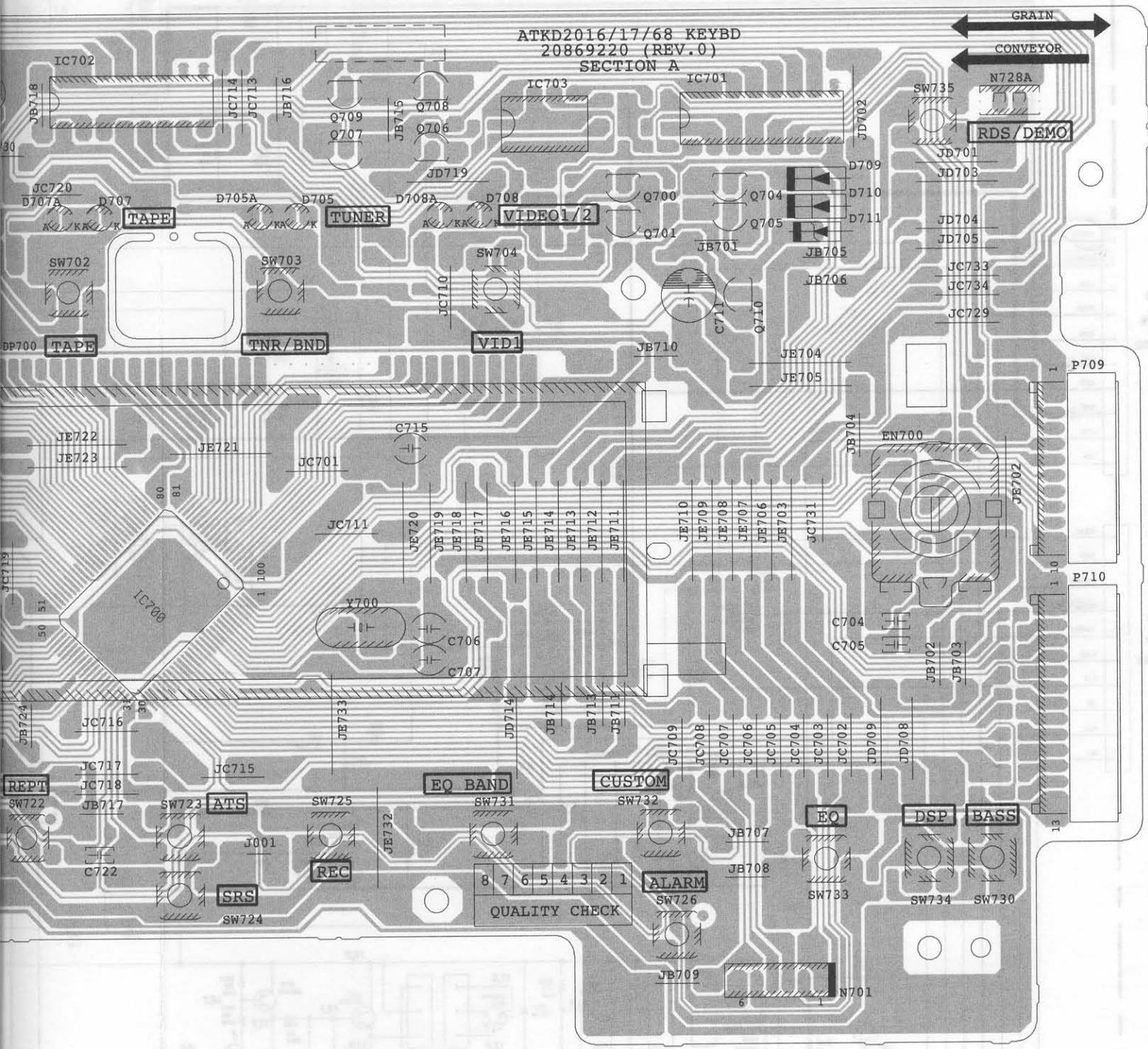


ST24C01B1

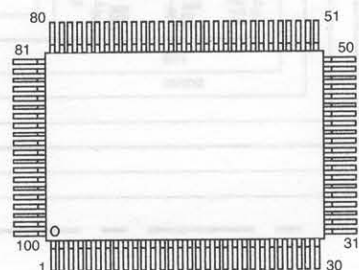
AMP

ATKD2016/17/68 KEYBD
20869220 (REV.0)
SECTION A

GRAIN
CONVEYOR

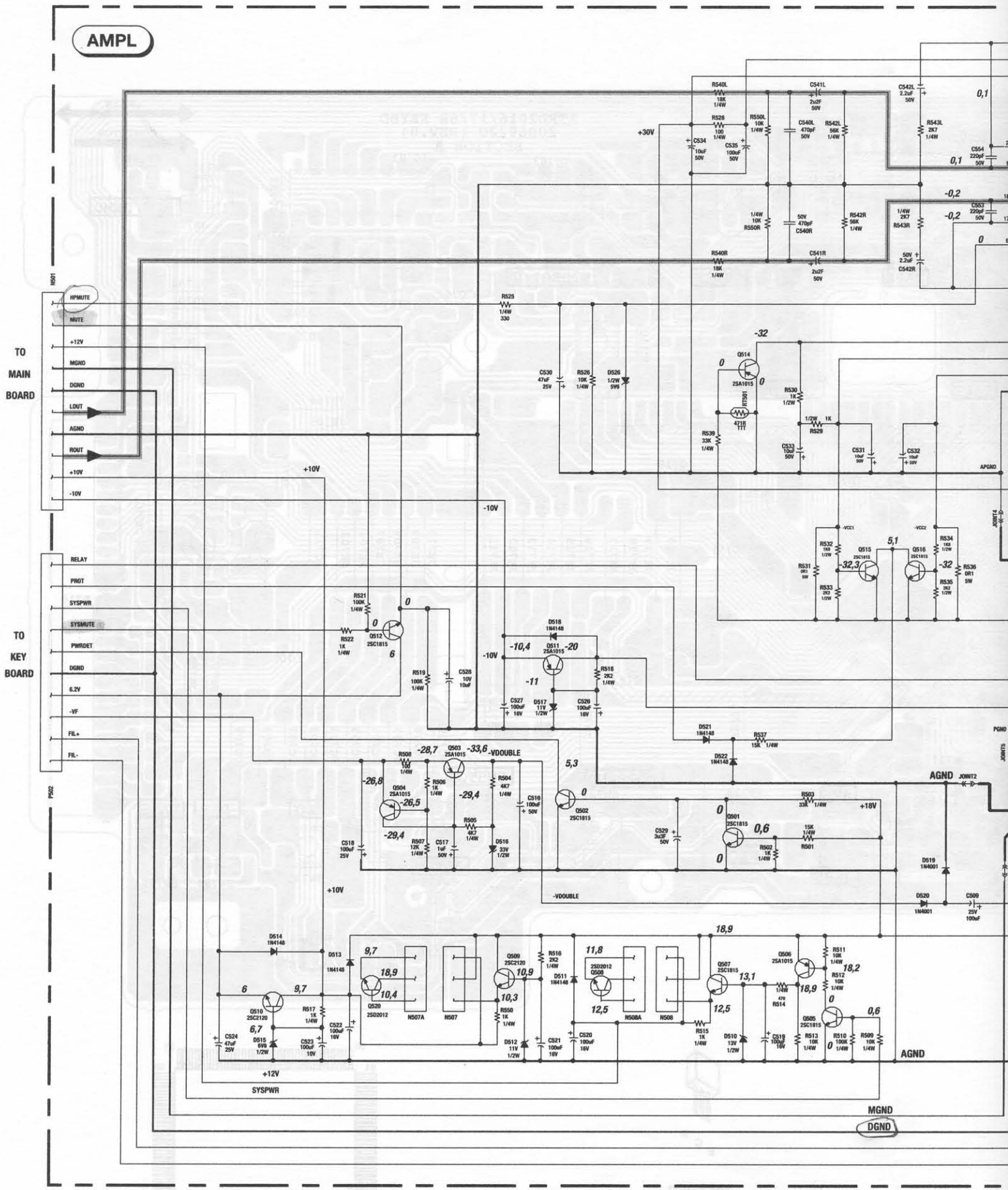


2SA950
2SC1815
2SC2120

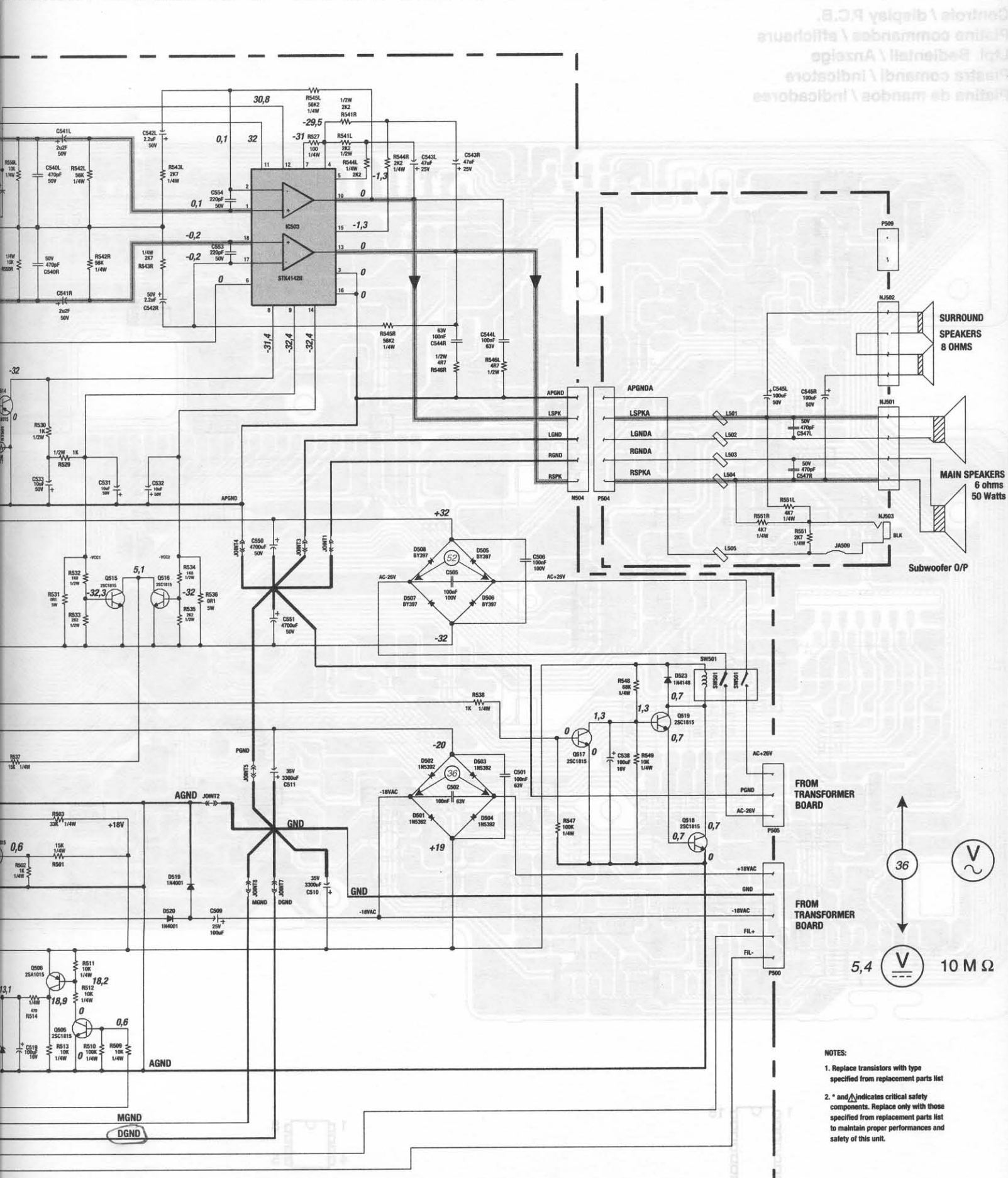


UPD 780204GF

AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD ENDVERSTÄRKER



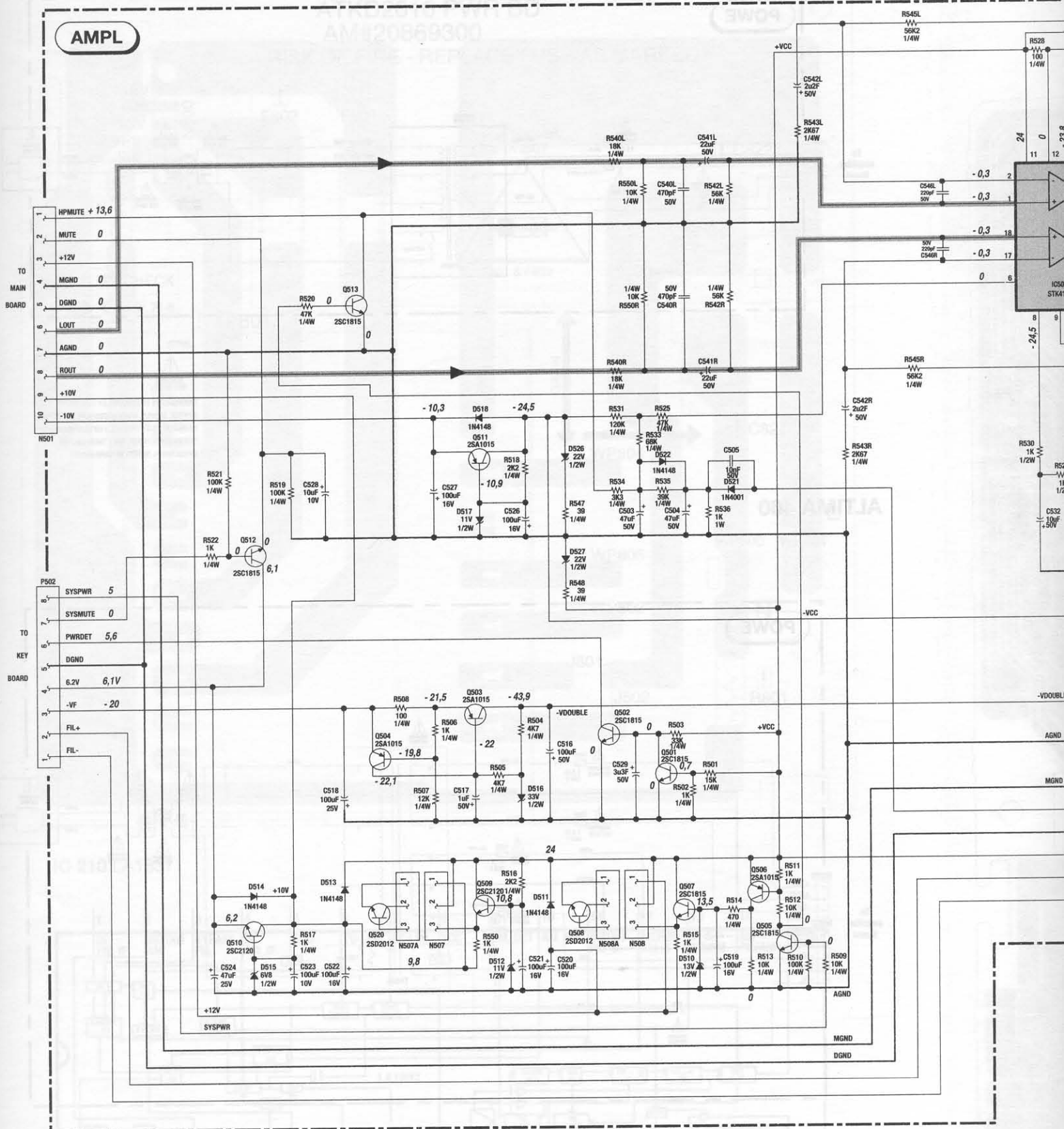
HALTBILD ENDVERSTÄRKER - SCHEMA AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (ALTIMA 460)



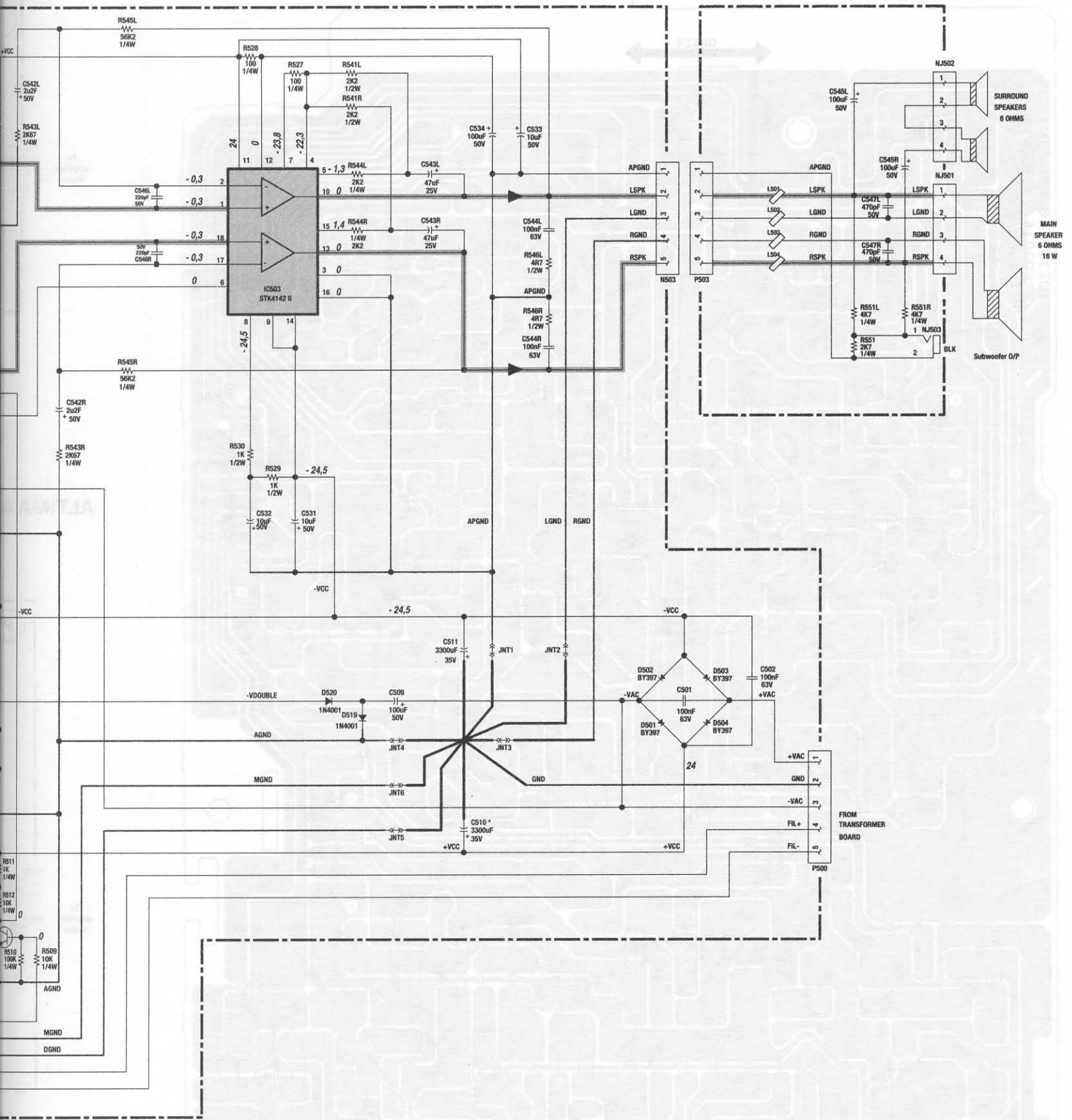
- NOTES:
1. Replace transistors with type specified from replacement parts list
 2. * and / indicates critical safety components. Replace only with those specified from replacement parts list to maintain proper performances and safety of this unit.

AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD ENDVERSTÄRKER

(ALTIMA 260/ALTIMA 360)

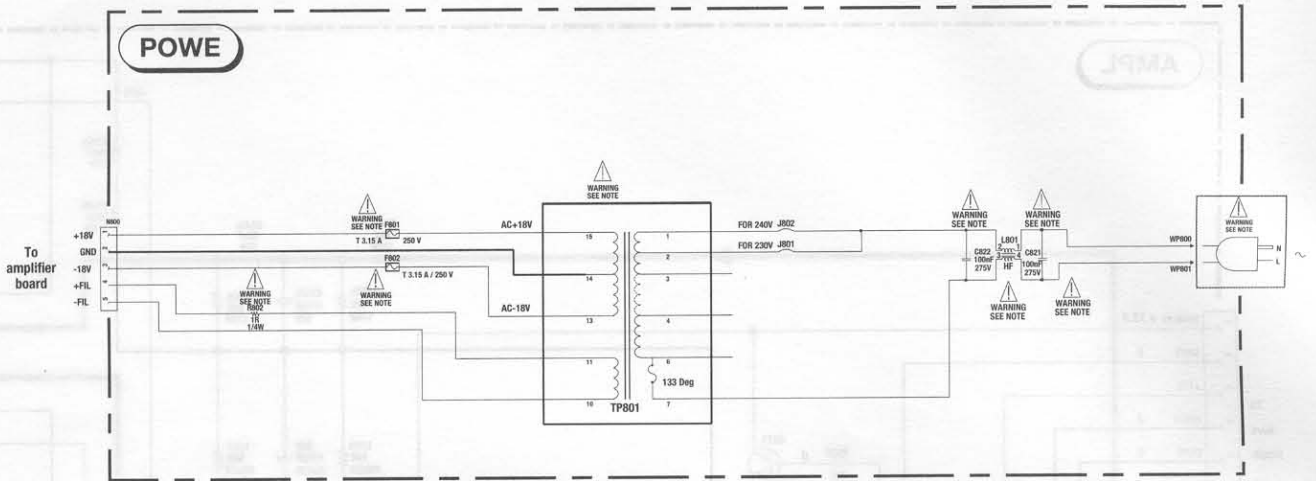


HALTBILD ENDVERSTÄRKER - SCHEMA AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR



POWER SUPPLY SCHEMATIC DIAGRAM - SCHEMA DE L'ALIMENTATION - SCHALTBILD NETZTEIL - SCHEMA ALIMENTAZIONE - ESQUEMA DE LA ALIMENTACIÓN

ALTIMA 260/ALTIMA 360

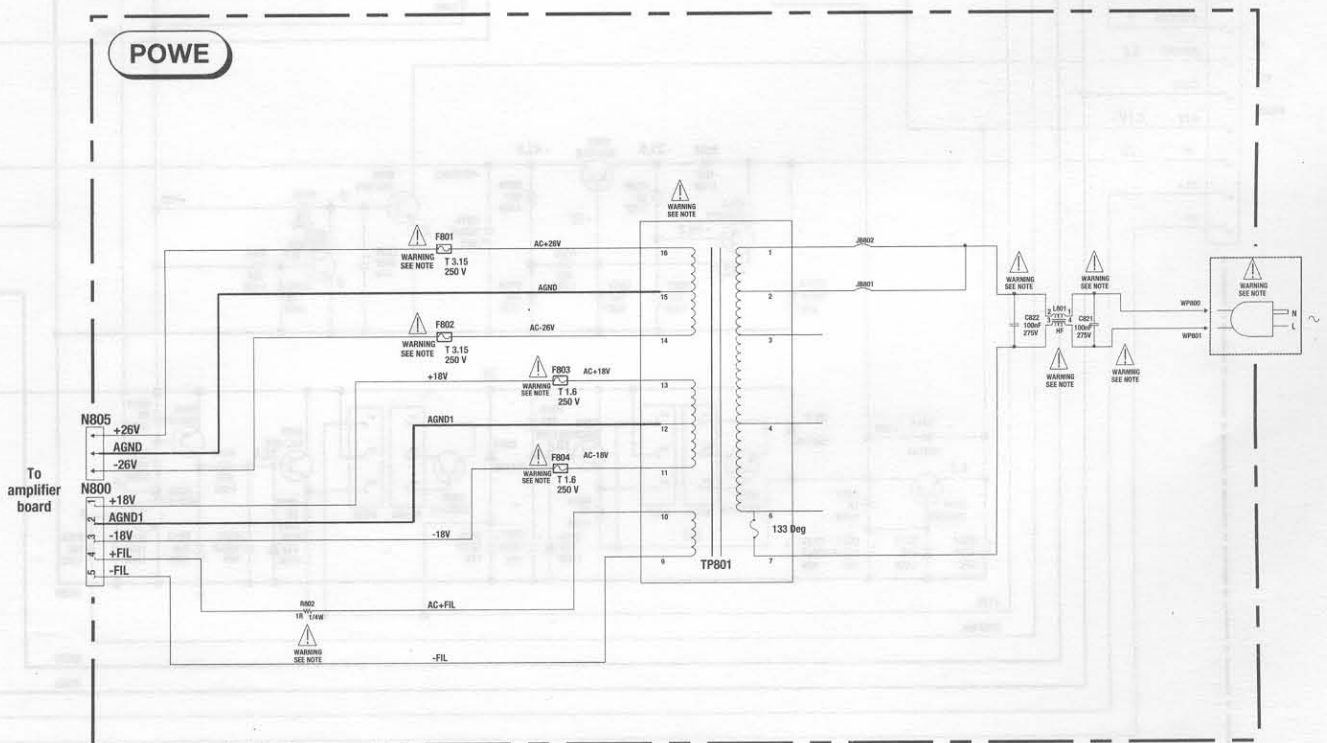


NOTES:



COMPONENTS DESIGNATED BY THE SAFETY SYMBOL SHOULD, WHEN NECESSARY FOR REPAIR, BE REPLACED BY ORIGINAL PARTS, APPROVED BY THE MANUFACTURER. ONLY THEN CAN THE OPERATIONAL SAFETY BE GUARANTEED.

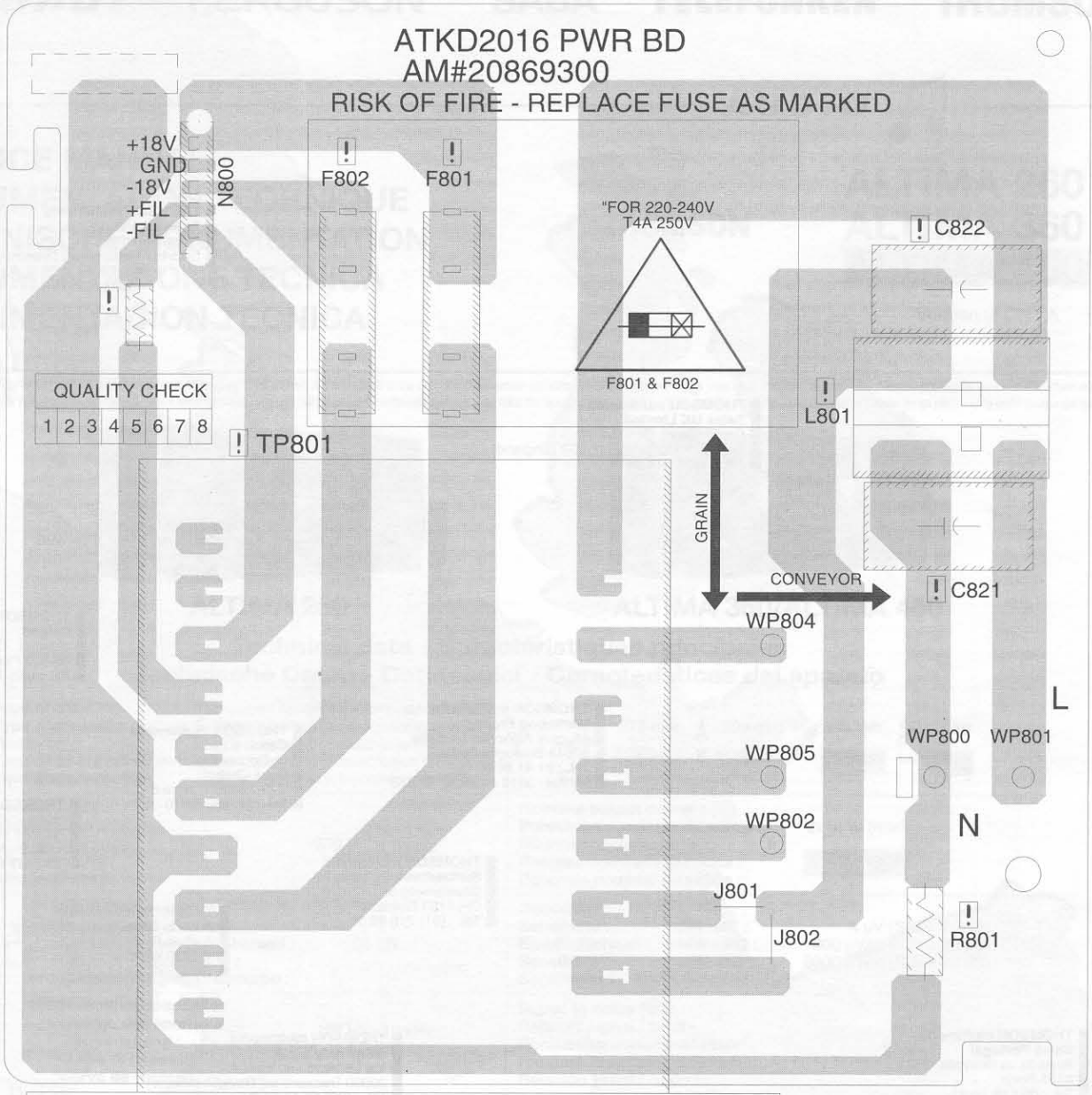
ALTIMA 460



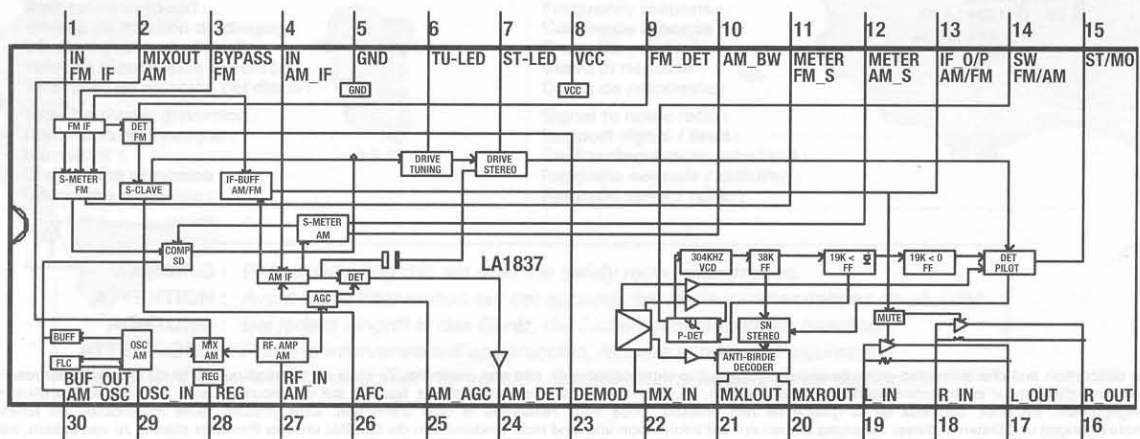
Power supply P.C.B.
 Platine alimantation
 Ltpl. Netzteil
 Piastra alimentare
 Platina alimentaci3n

ATKD2016 PWR BD
 AM#20869300

RISK OF FIRE - REPLACE FUSE AS MARKED



IC 210 LA1837



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 Platine amplificateur
 Ltpl. Endverstärker
 Piastra amplificatore
 Platina amplificador

