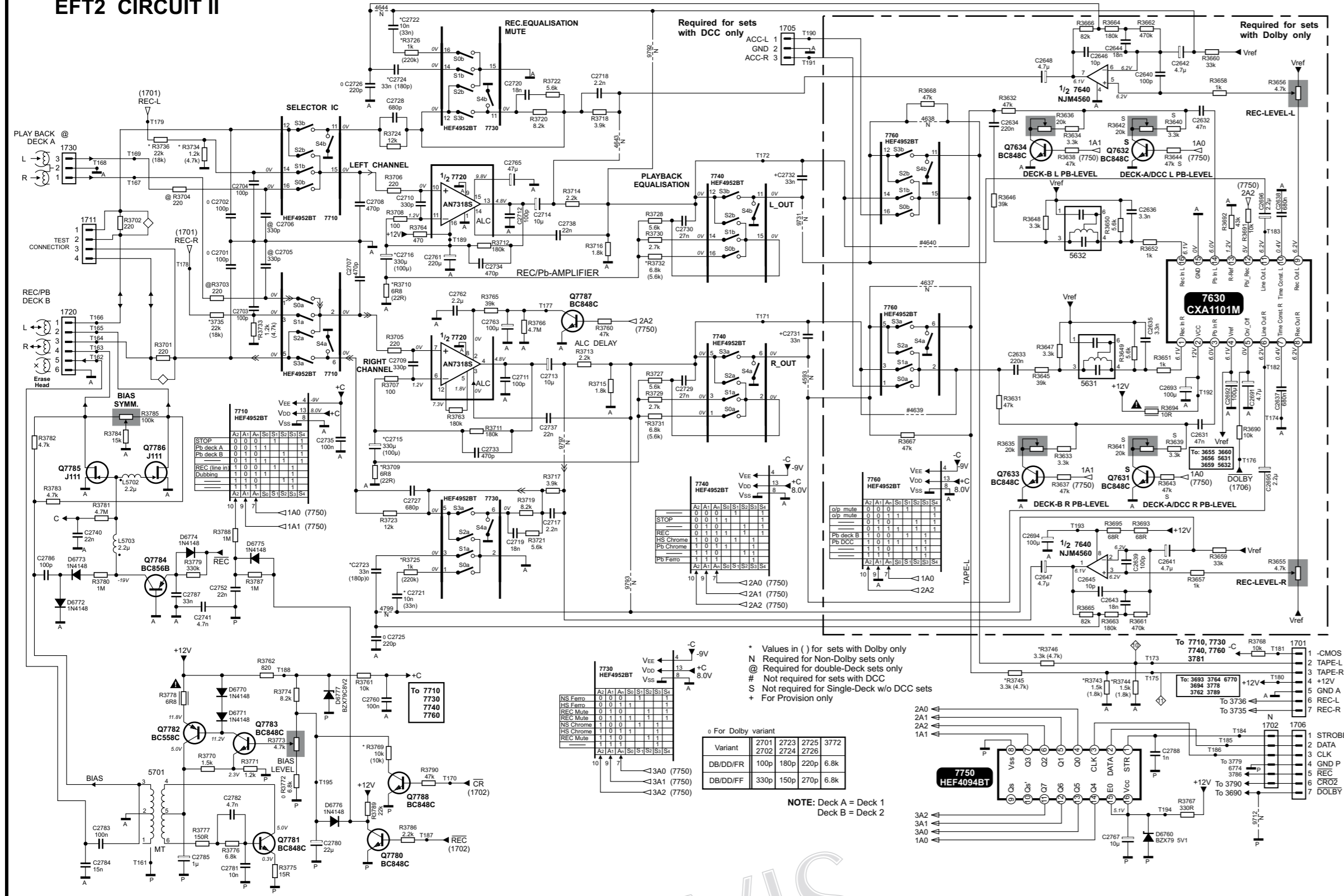
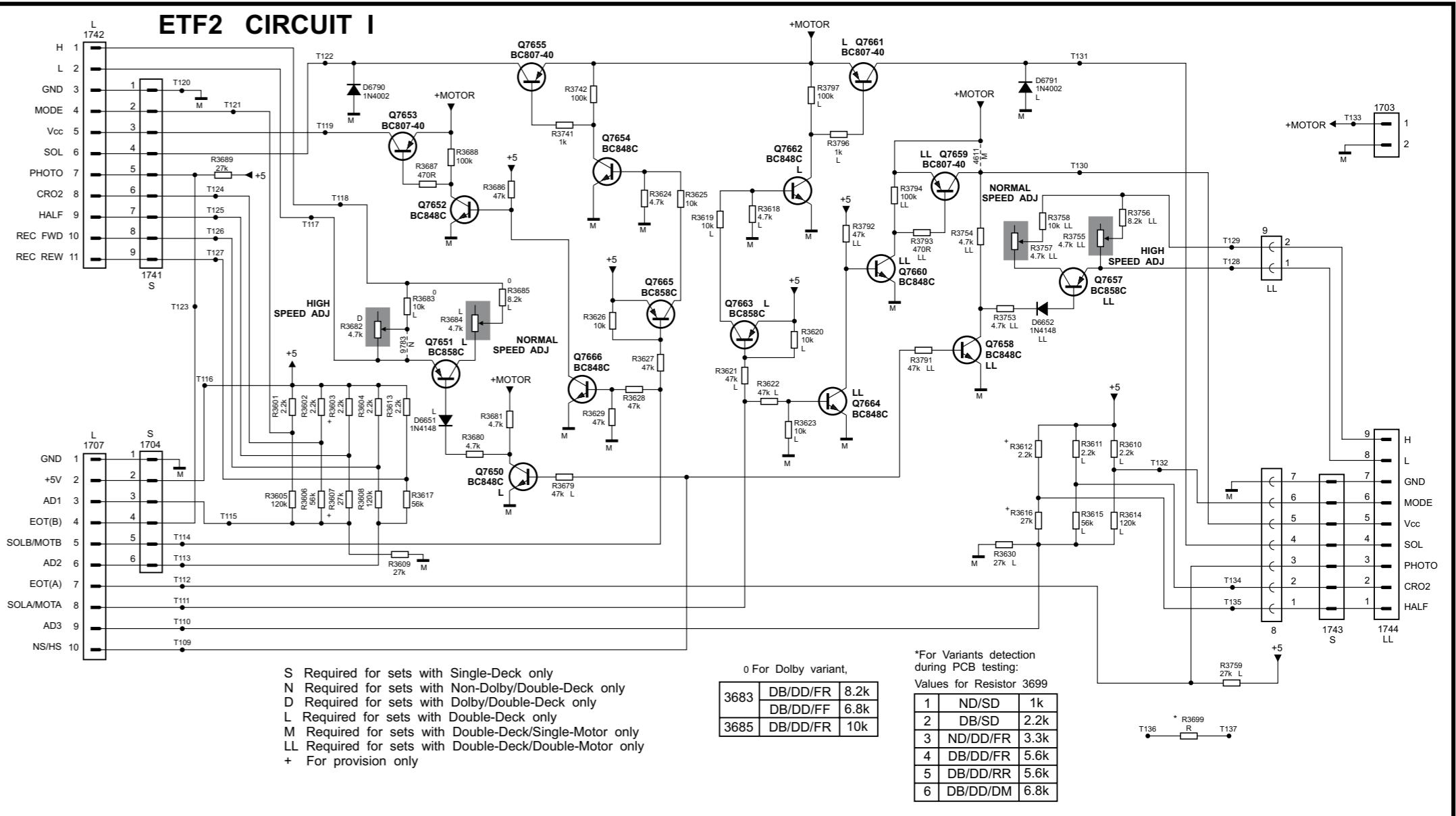
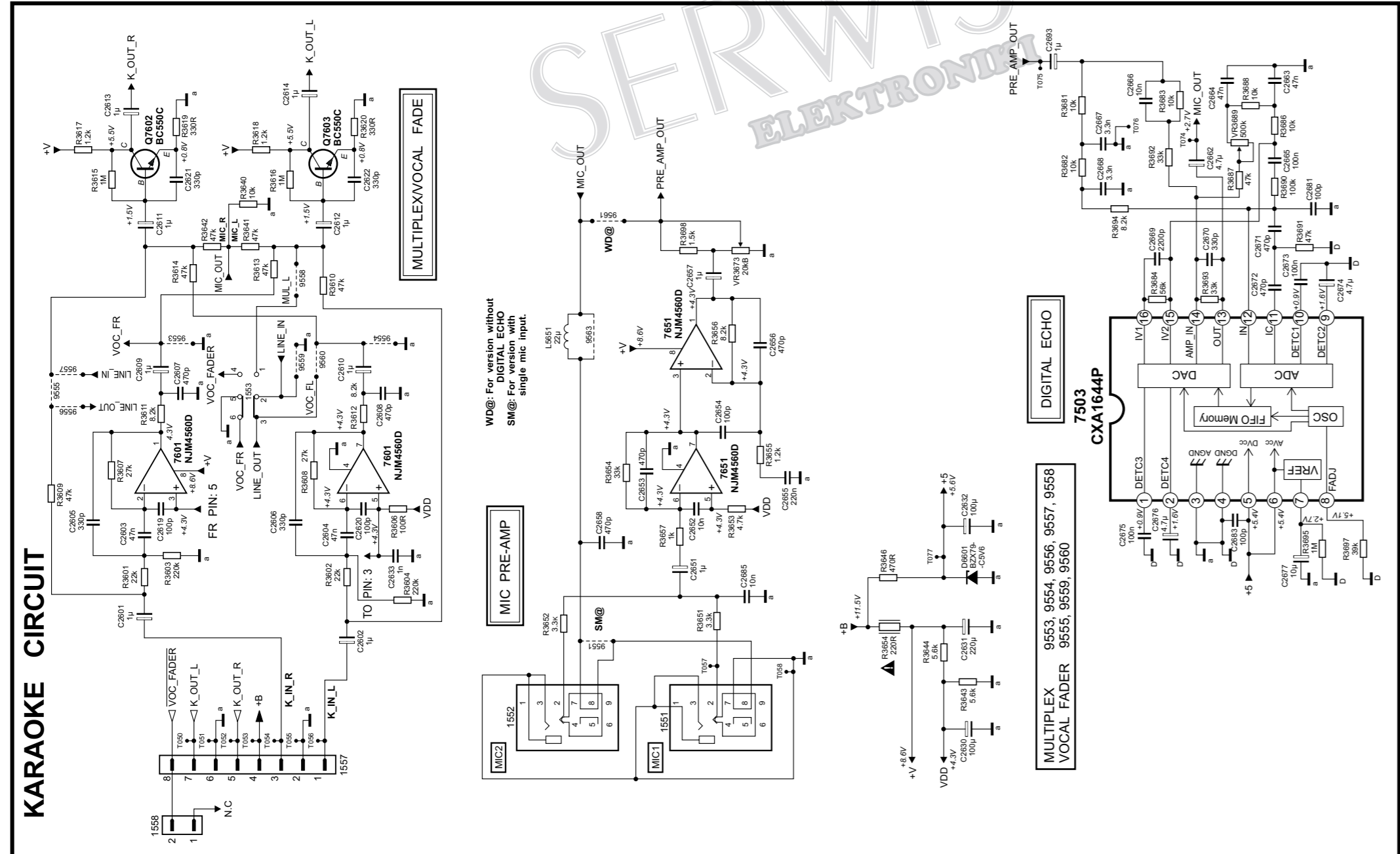
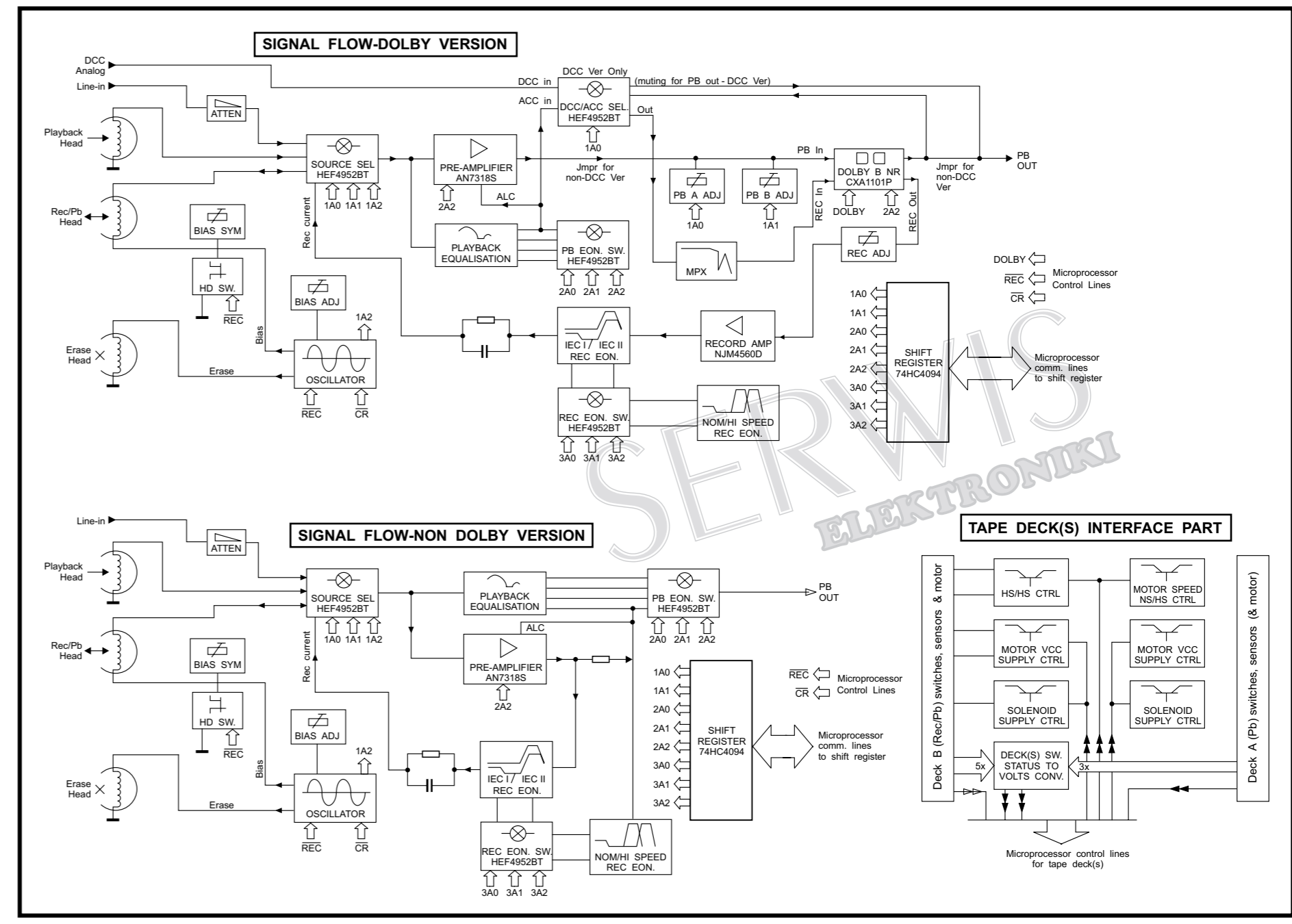


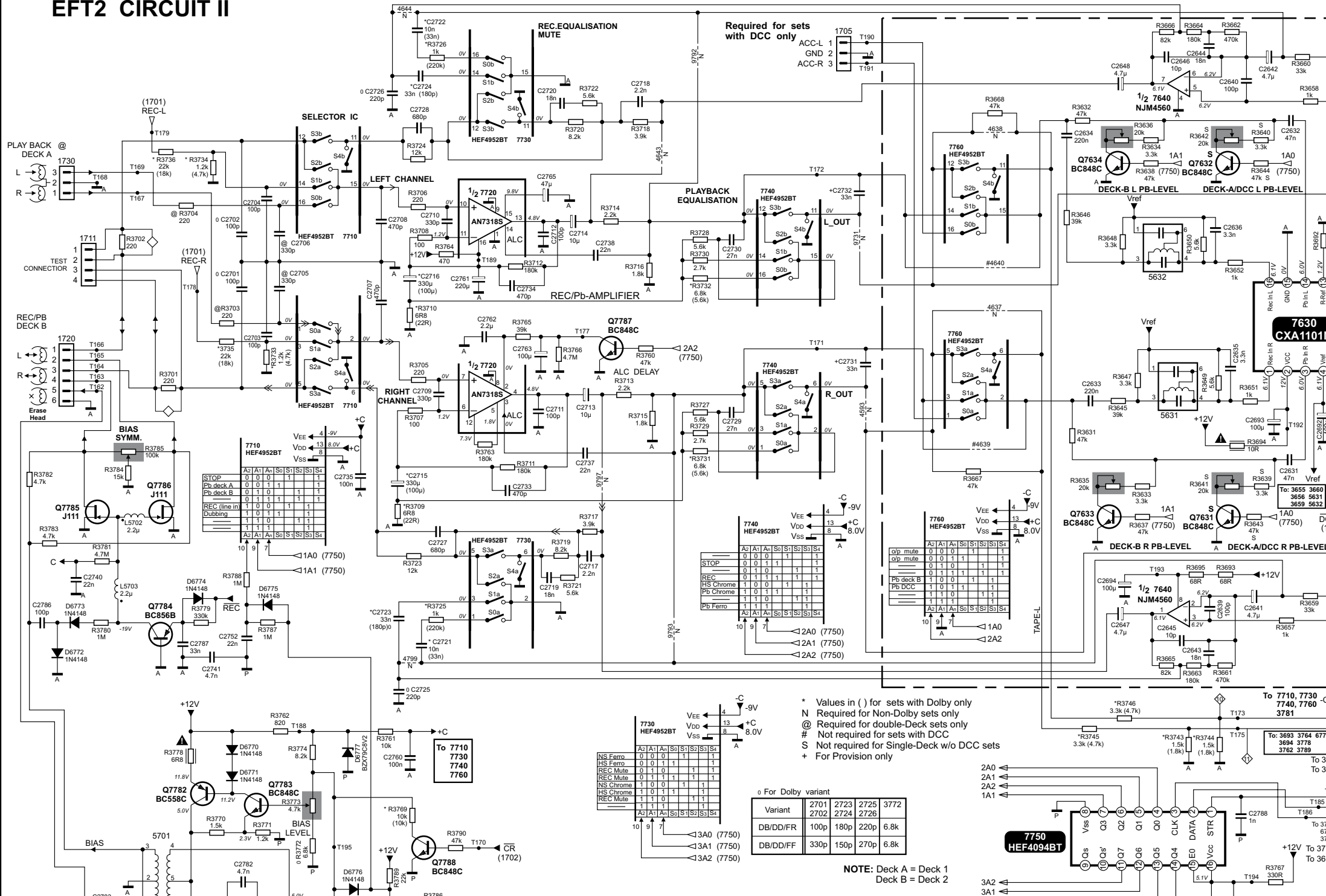
### EFT2 CIRCUIT II



### EFT 2 BLOCK DIAGRAM



# EFT2 CIRCUIT II



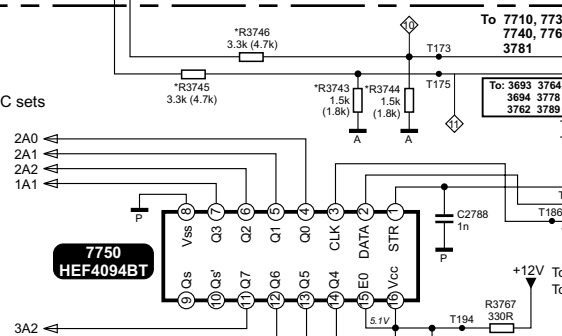
STOP	A2	A1	An	S0	S1	S2	S3	S4
Pb deck A	0	0	0	1	1	1	1	1
Pb deck B	0	1	0	1	1	1	1	1
REC (line in)	1	0	0	1	1	1	1	1
Dubbing	1	1	0	1	1	1	1	1
	1	1	1	0	1	1	1	1
	1	1	1	1	0	1	1	1

STOP	A2	A1	An	S0	S1	S2	S3	S4
o/p mute	0	0	0	1	1	1	1	1
o/p mute	0	0	1	1	1	1	1	1
REC	0	1	0	1	1	1	1	1
HS Chrome	1	0	0	1	1	1	1	1
Pb Chrome	1	0	1	1	1	1	1	1
Pb Ferro	1	1	0	1	1	1	1	1
	1	1	1	0	1	1	1	1

- \* Values in ( ) for sets with Dolby only
- N Required for Non-Dolby sets only
- @ Required for double-Deck sets only
- # Not required for sets with DCC
- S Not required for Single-Deck w/o DCC sets
- + For Provision only

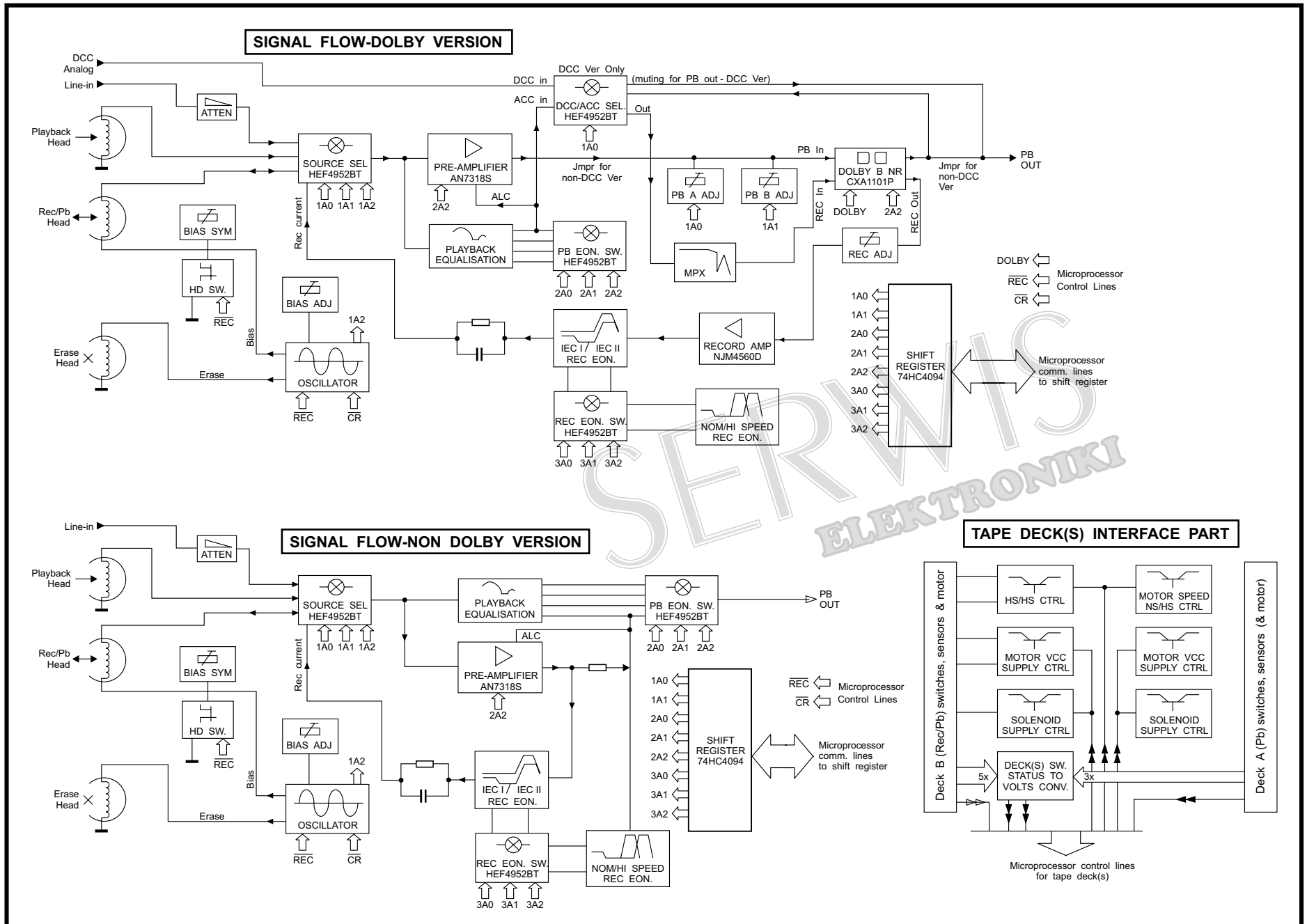
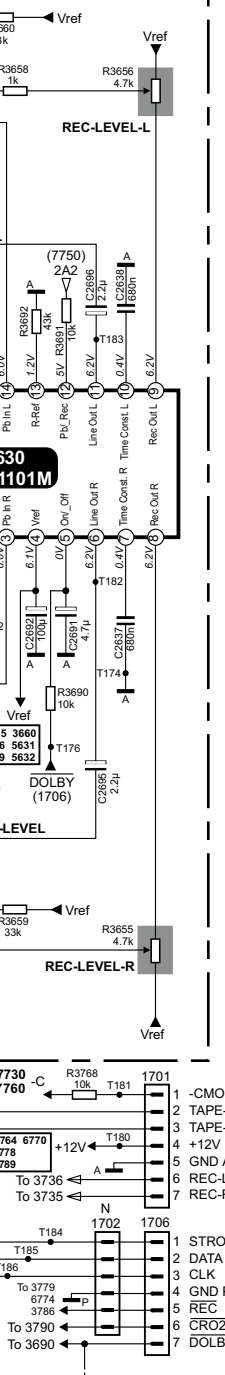
Variant	2701	2702	2723	2724	2725	3772
DB/DD/FR	100p	180p	220p	2725	2726	6.8k
DB/DD/FF	330p	150p	270p	6.8k		

NOTE: Deck A = Deck 1  
Deck B = Deck 2



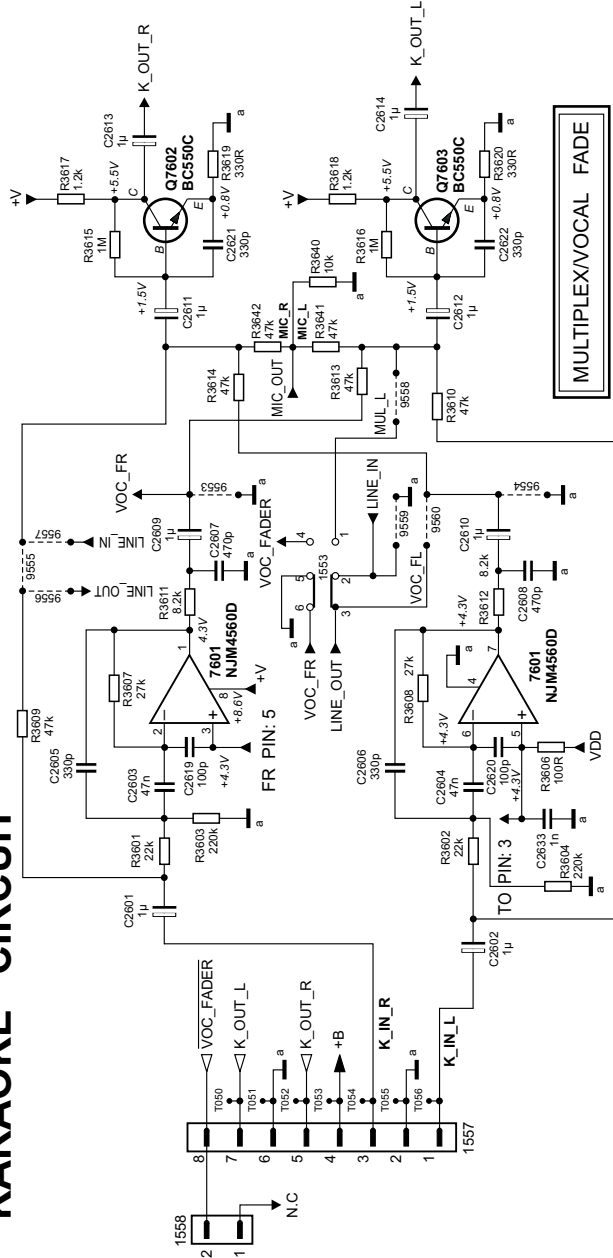
# EFT 2 BLOCK DIAGRAM

Required for sets with Dolby only





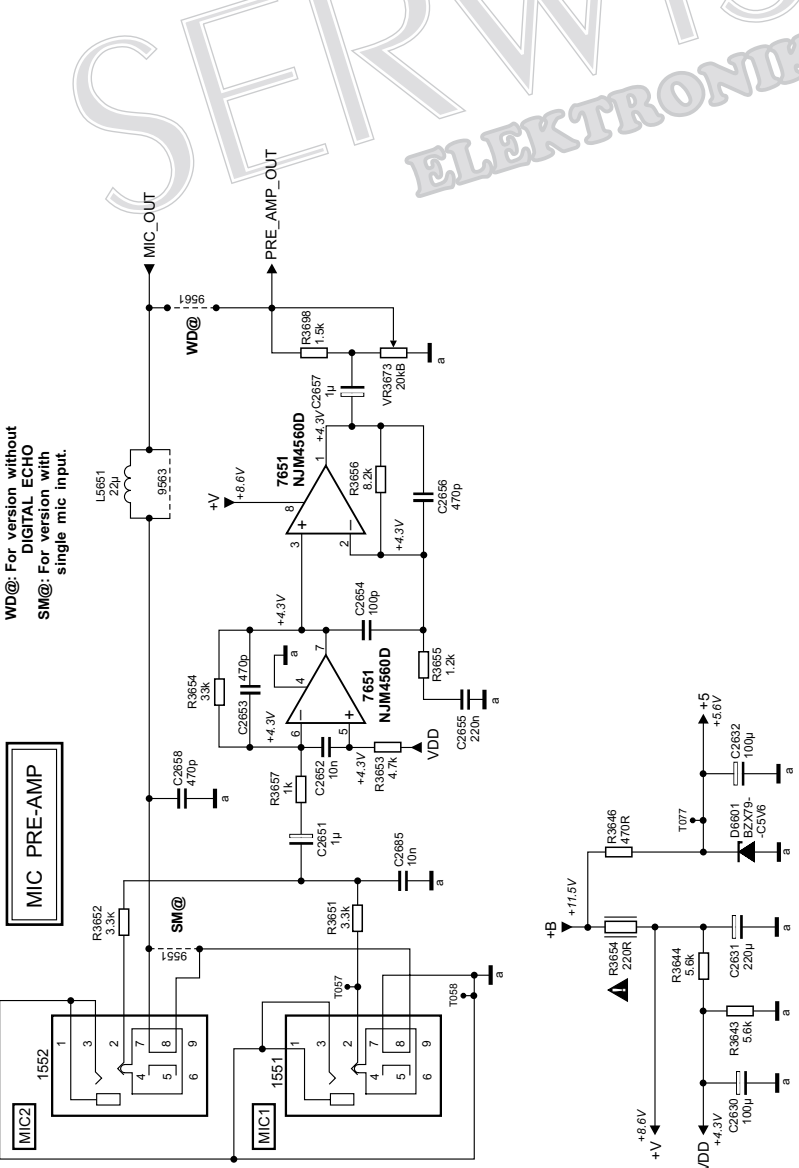
# KARAOKE CIRCUIT



**MULTIPLEX/VOCAL FADE**

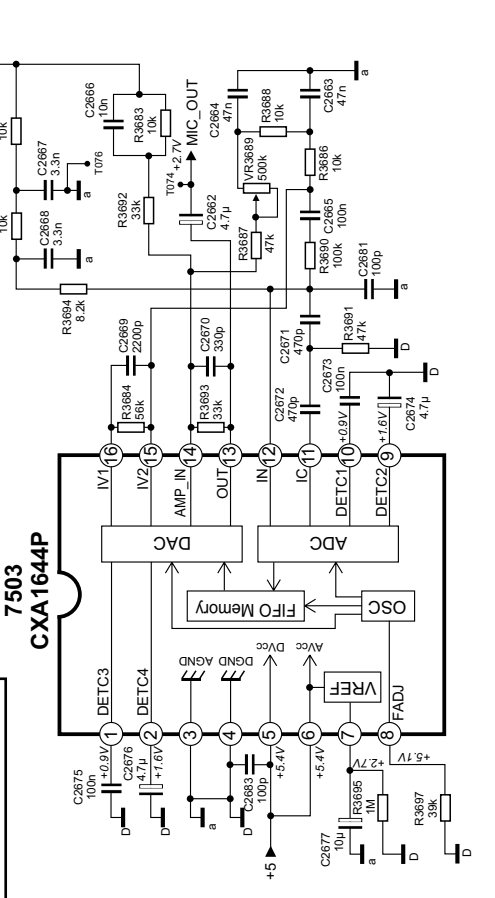
**MIC PRE-AMP**

WD@: For version without  
DIGITAL ECHO  
SM@: For version with  
single mic input.

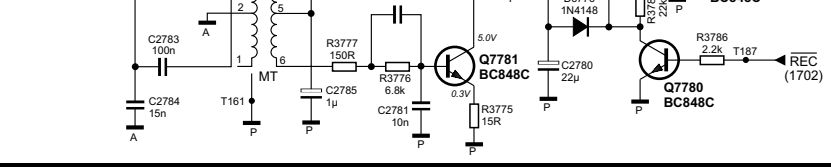


**DIGITAL ECHO**

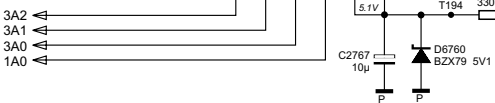
**MULTIPLEX VOCAL FADER** 9553, 9554, 9556, 9557, 9558  
9555, 9559, 9560



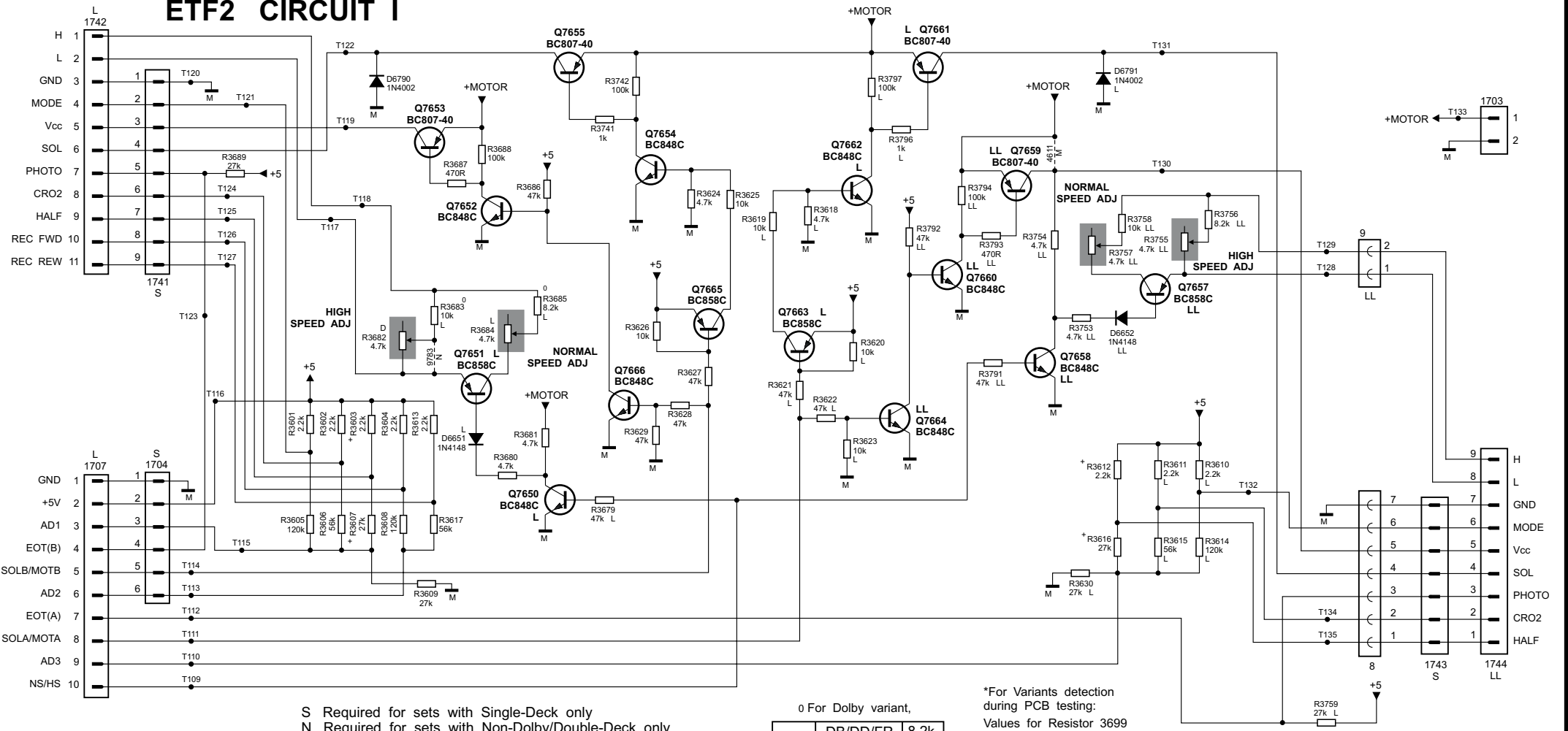
**7503 CXA1644P**



Deck B = Deck 2



# ETF2 CIRCUIT I



S Required for sets with Single-Deck only  
 N Required for sets with Non-Dolby/Double-Deck only  
 D Required for sets with Dolby/Double-Deck only  
 L Required for sets with Double-Deck only  
 M Required for sets with Double-Deck/Single-Motor only  
 LL Required for sets with Double-Deck/Double-Motor only  
 + For provision only

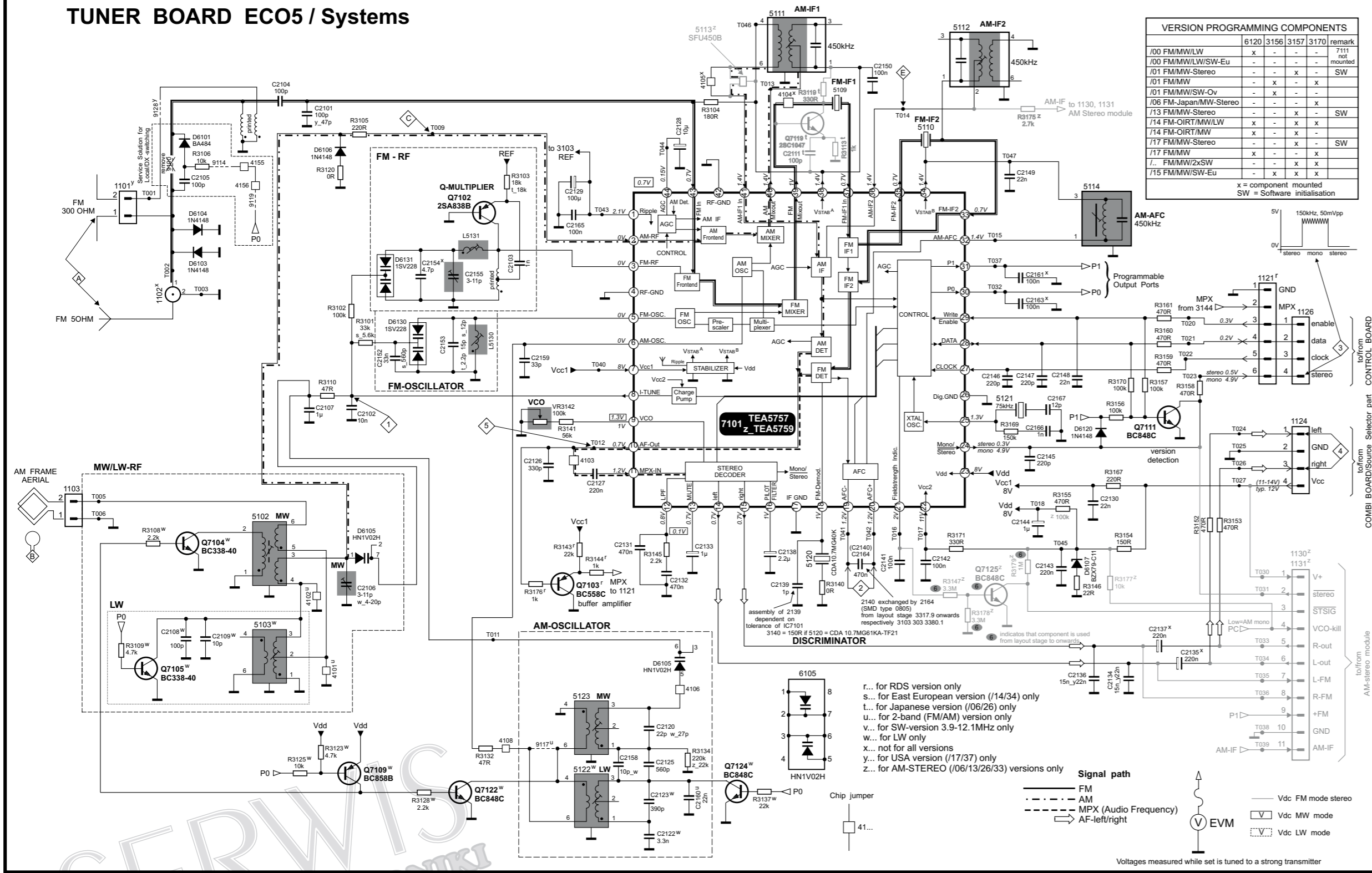
0 For Dolby variant,

3683	DB/DD/FR	8.2k
	DB/DD/FF	6.8k
3685	DB/DD/FR	10k

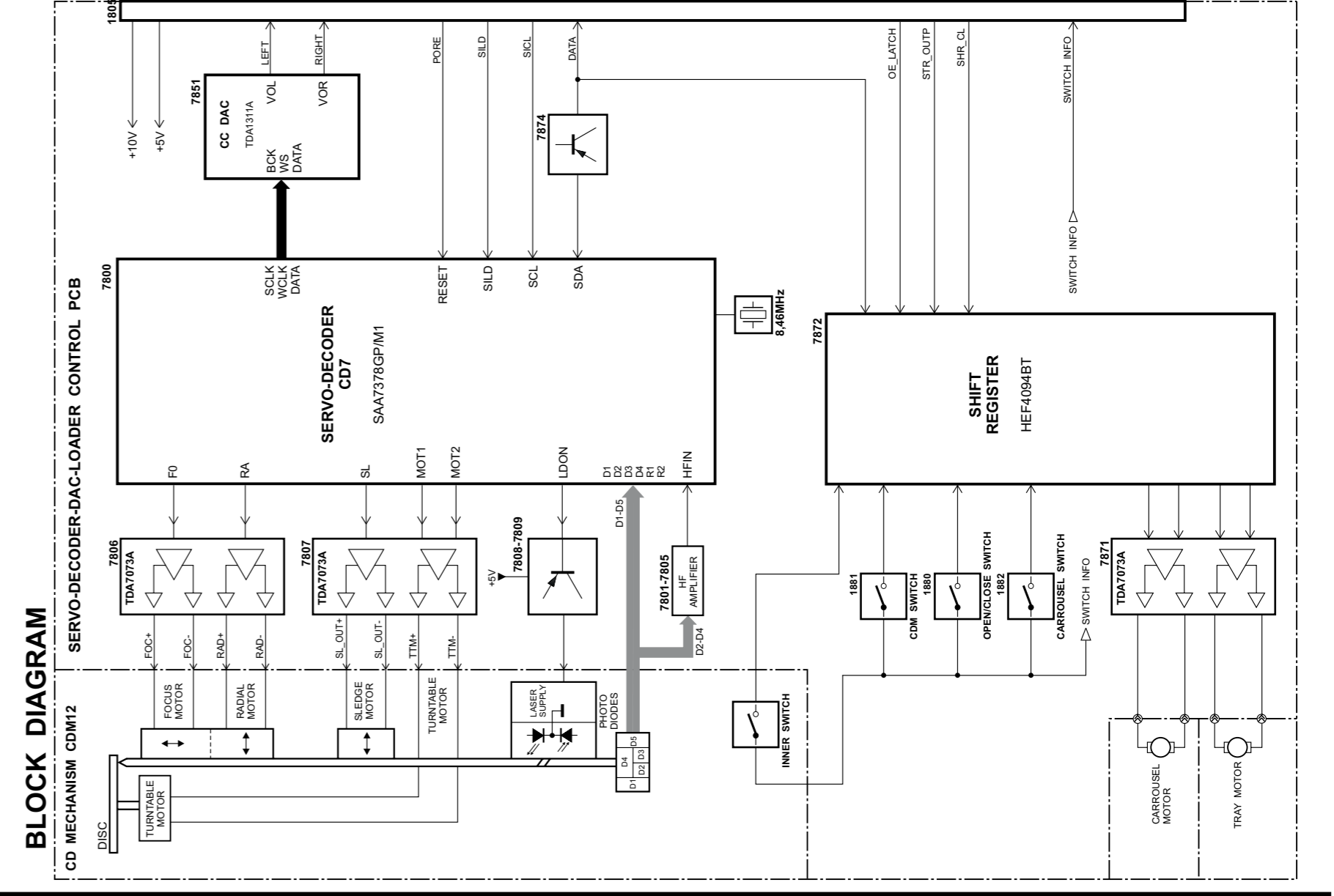
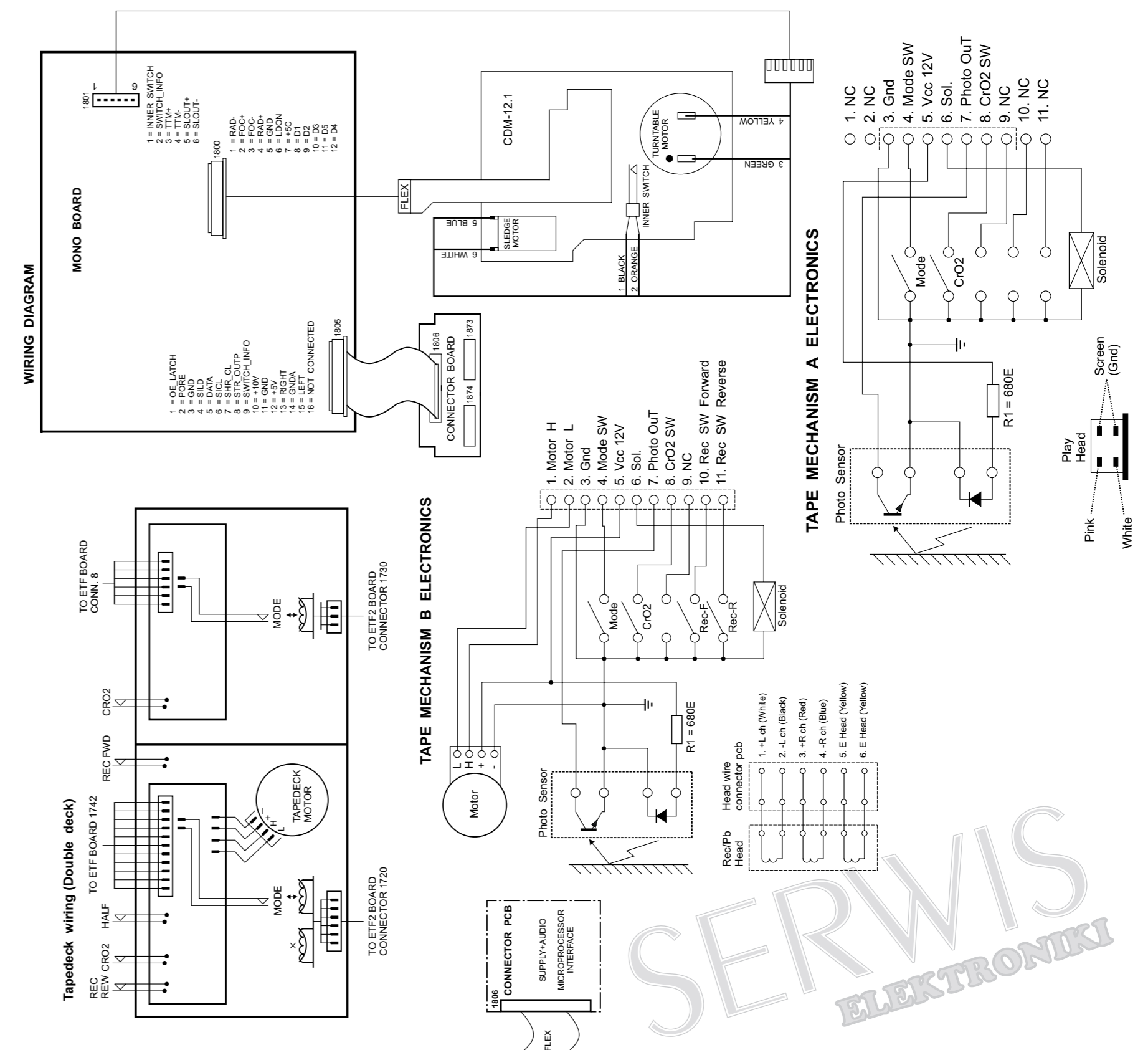
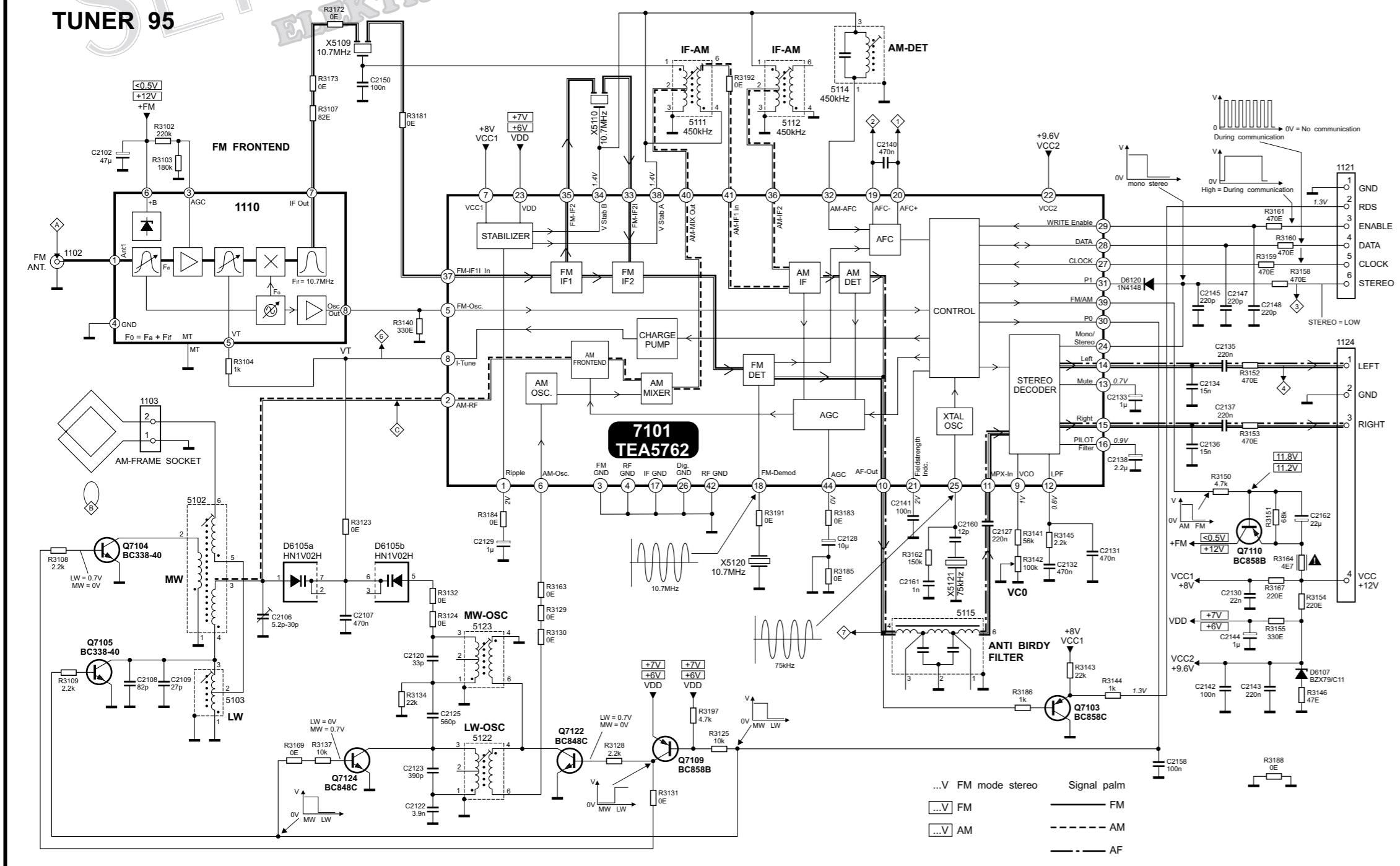
\*For Variants detection during PCB testing:  
 Values for Resistor 3699

1	ND/SD	1k
2	DB/SD	2.2k
3	ND/DD/FR	3.3k
4	DB/DD/FR	5.6k
5	DB/DD/RR	5.6k
6	DB/DD/DM	6.8k

**TUNER BOARD ECO5 / Systems**

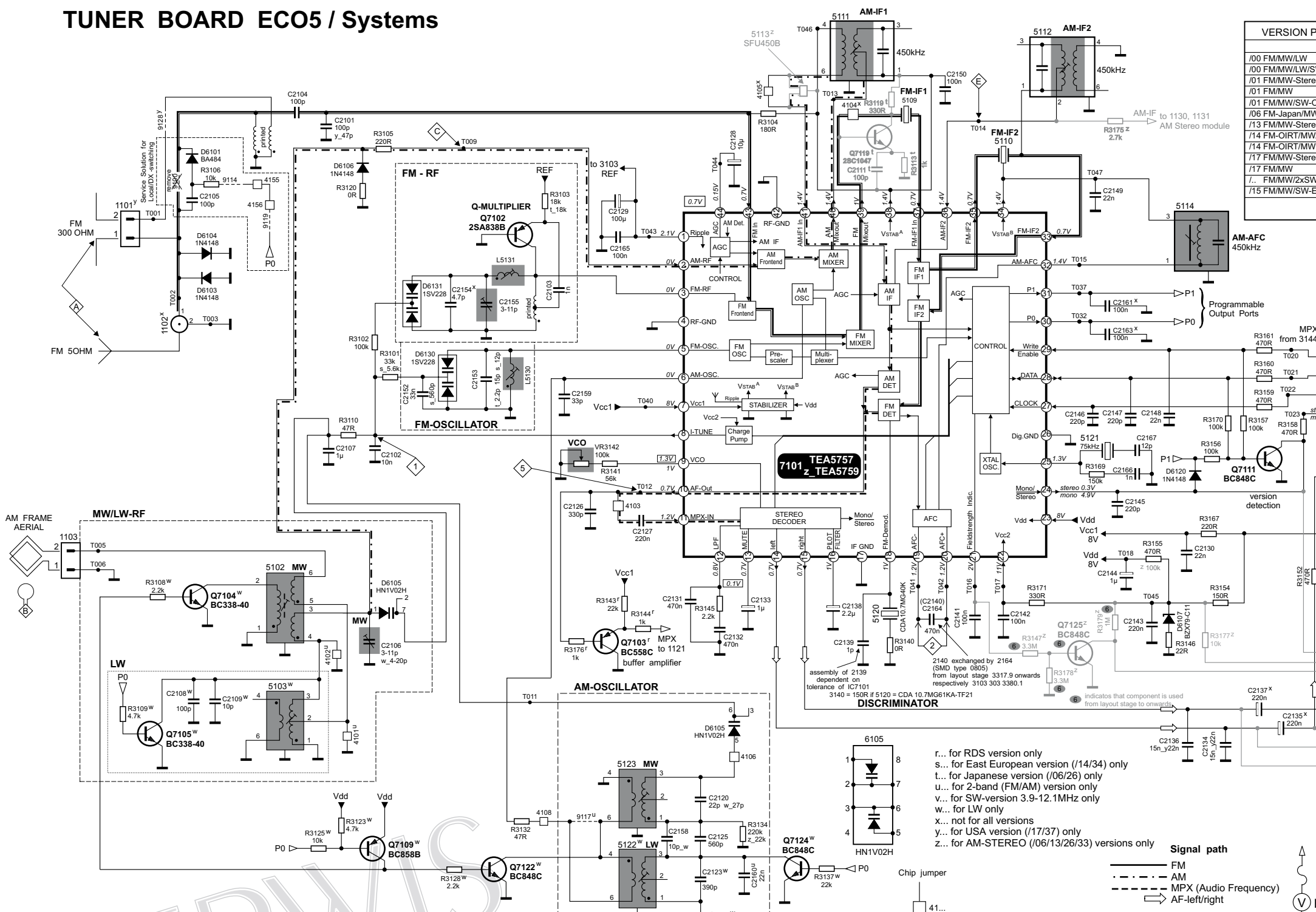


**TUNER 95**

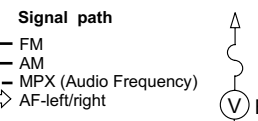


# TUNER BOARD ECO5 / Systems

VERSION PR
/00 FM/MW/LW
/00 FM/MW/LW/SW
/01 FM/MW-Stereo
/01 FM/MW
/01 FM/MW/SW-Ov
/06 FM-Japan/MW-S
/13 FM/MW-Stereo
/14 FM-OIRT/MW/L
/14 FM-OIRT/MW
/17 FM/MW-Stereo
/17 FM/MW
/.. FM/MW/2xSW
/15 FM/MW/SW-Eu



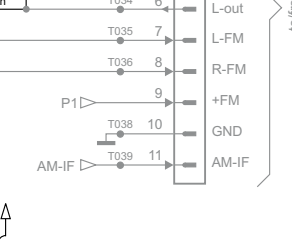
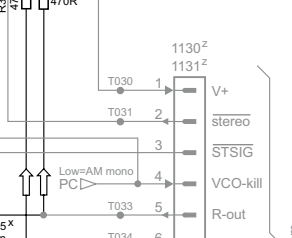
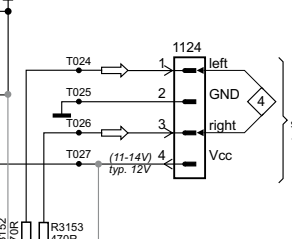
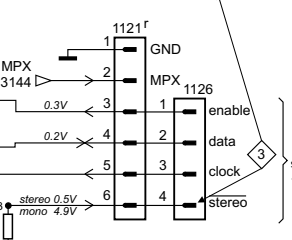
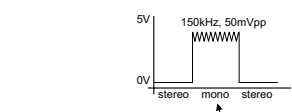
r... for RDS version only  
 s... for East European version (/14/34) only  
 t... for Japanese version (/06/26) only  
 u... for 2-band (FM/AM) version only  
 v... for SW-version 3.9-12.1MHz only  
 w... for LW only  
 x... not for all versions  
 y... for USA version (/17/37) only  
 z... for AM-STEREO (/06/13/26/33) versions only





ON PROGRAMMING COMPONENTS					
	6120	3156	3157	3170	remark
W	x	-	-	-	7111 not mounted
W/SW-Eu	-	-	-	-	SW
Stereo	-	x	-	x	
SW-Ov	-	x	-	-	
y/MW-Stereo	-	-	-	x	
Stereo	-	-	x	-	SW
/MW/LW	x	-	x	x	
/MW	x	-	x	-	
Stereo	-	-	x	-	SW
xSW	x	-	-	x	
SW-Eu	-	x	x	x	

x = component mounted  
SW = Software initialisation

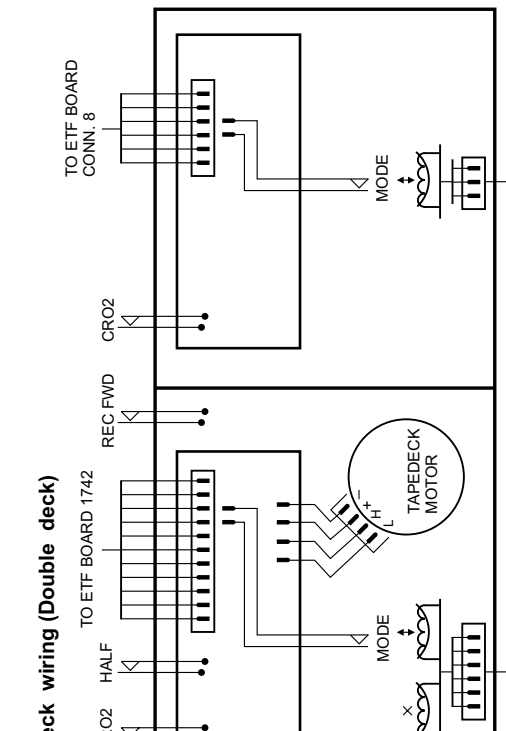
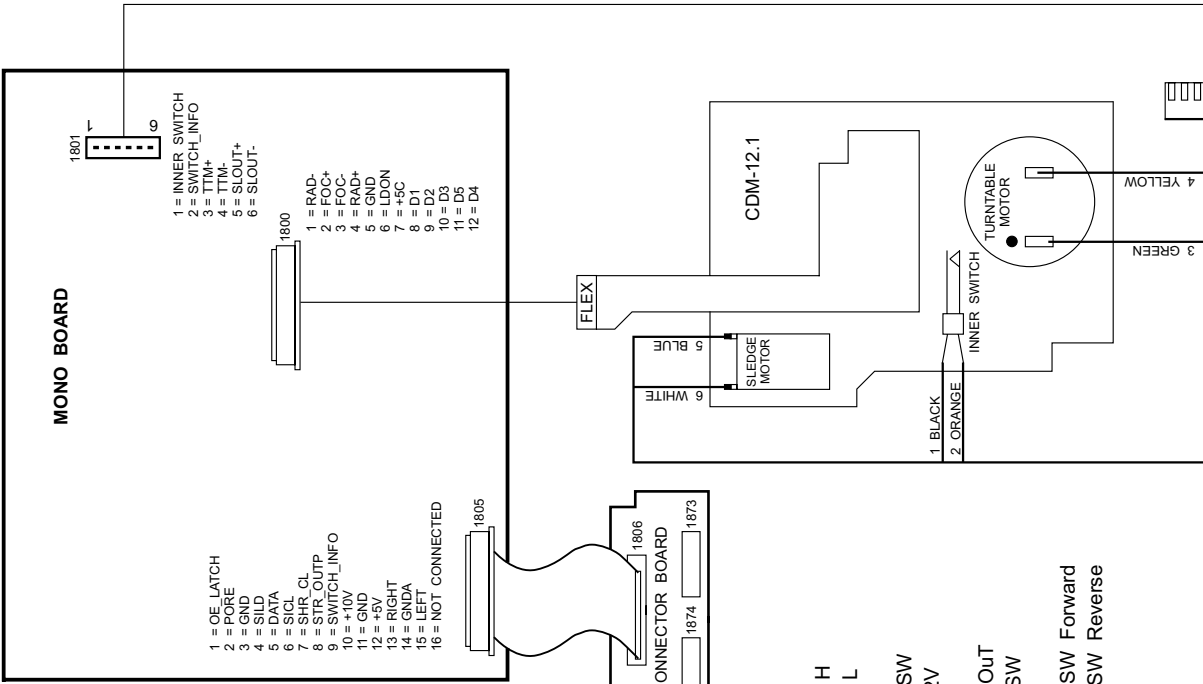


— Vdc FM mode stereo  
 □ Vdc MW mode  
 ▨ Vdc LW mode

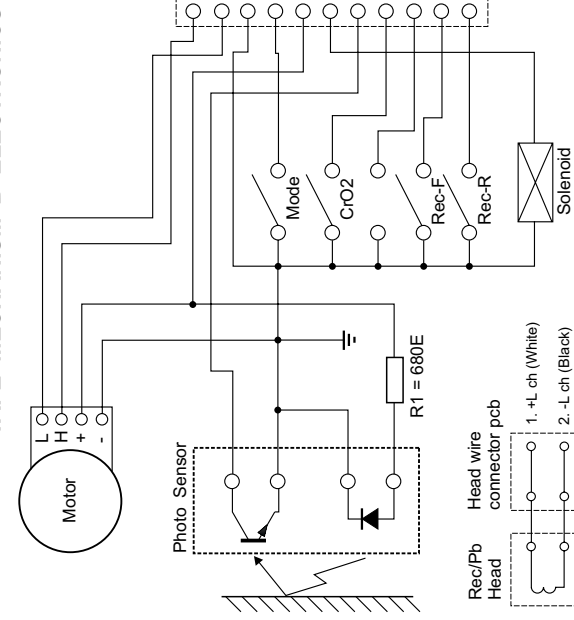
to/from COMBI BOARD/Source Selector part CONTROL BOARD

to/from AM-stereo module

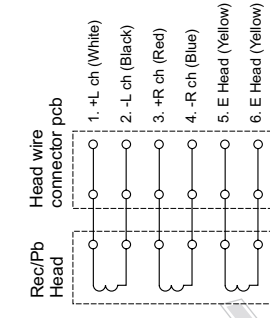
### WIRING DIAGRAM



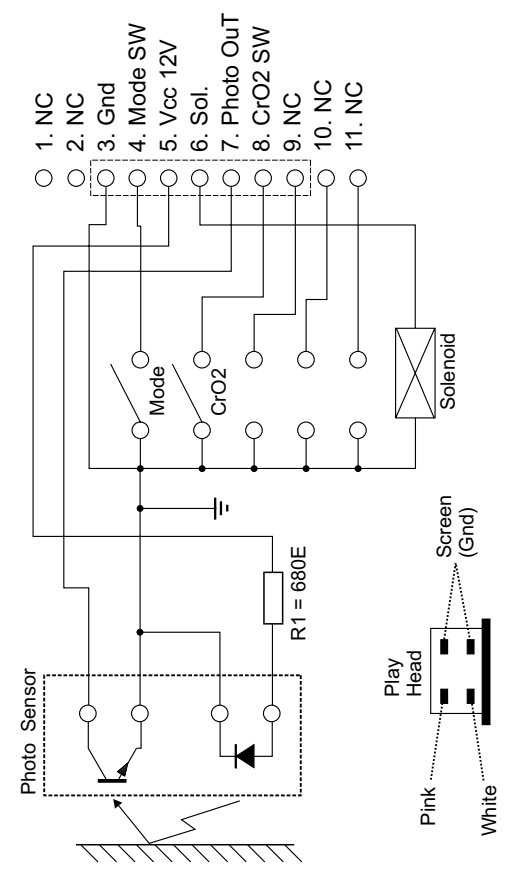
### TAPE MECHANISM B ELECTRONICS



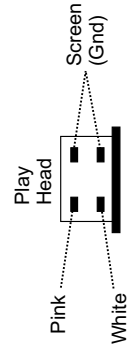
- 1. Motor H
- 2. Motor L
- 3. Gnd
- 4. Mode SW
- 5. Vcc 12V
- 6. Sol.
- 7. Photo Out
- 8. CrO2 SW
- 9. NC
- 10. Rec SW Forward
- 11. Rec SW Reverse



### TAPE MECHANISM A ELECTRONICS



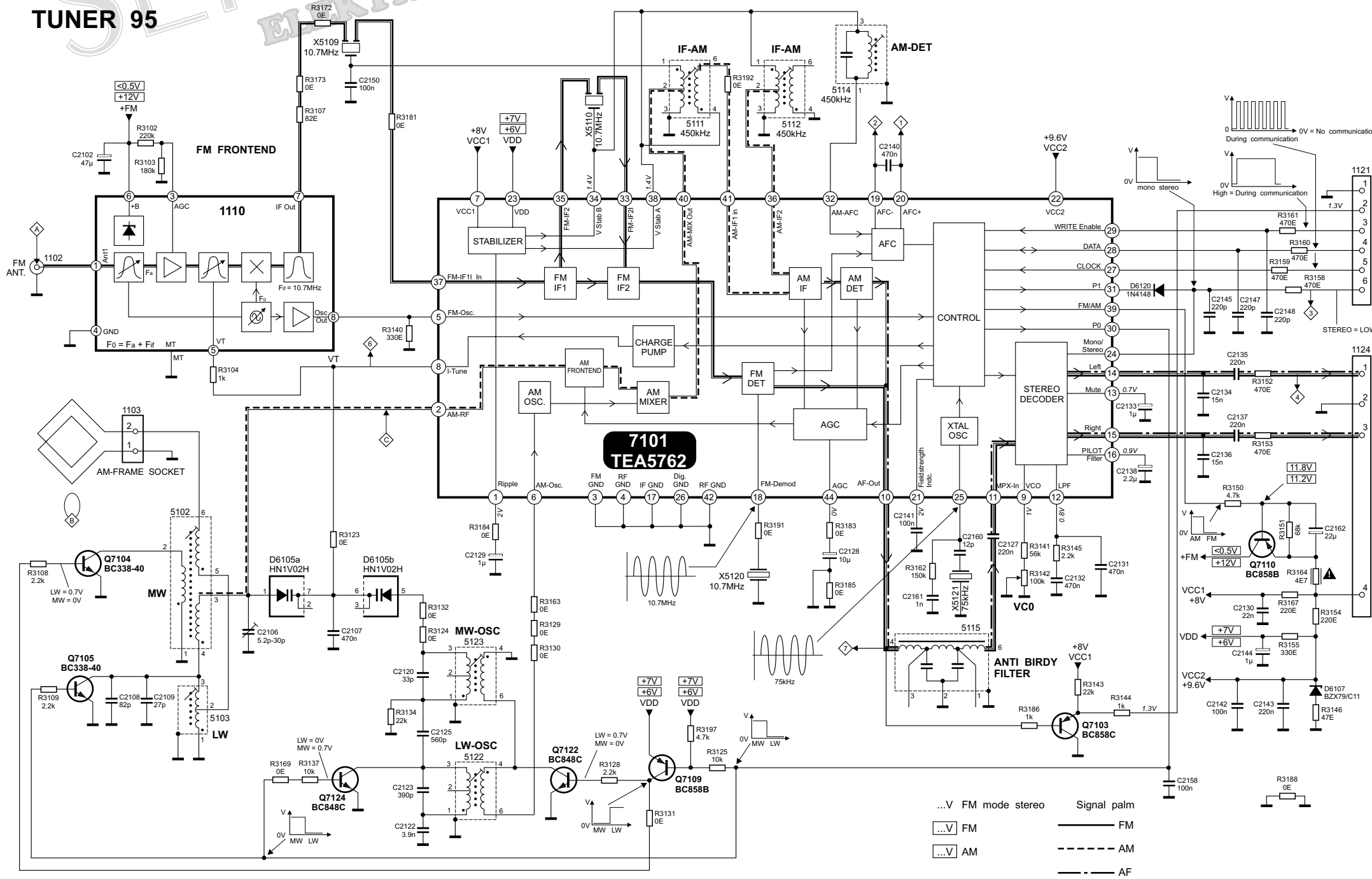
- 1. NC
- 2. NC
- 3. Gnd
- 4. Mode SW
- 5. Vcc 12V
- 6. Sol.
- 7. Photo Out
- 8. CrO2 SW
- 9. NC
- 10. NC
- 11. NC



STEREOWIS  
 KONKI

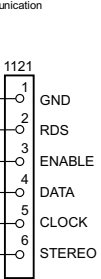
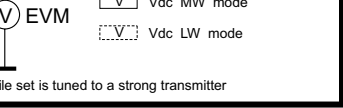


# TUNER 95



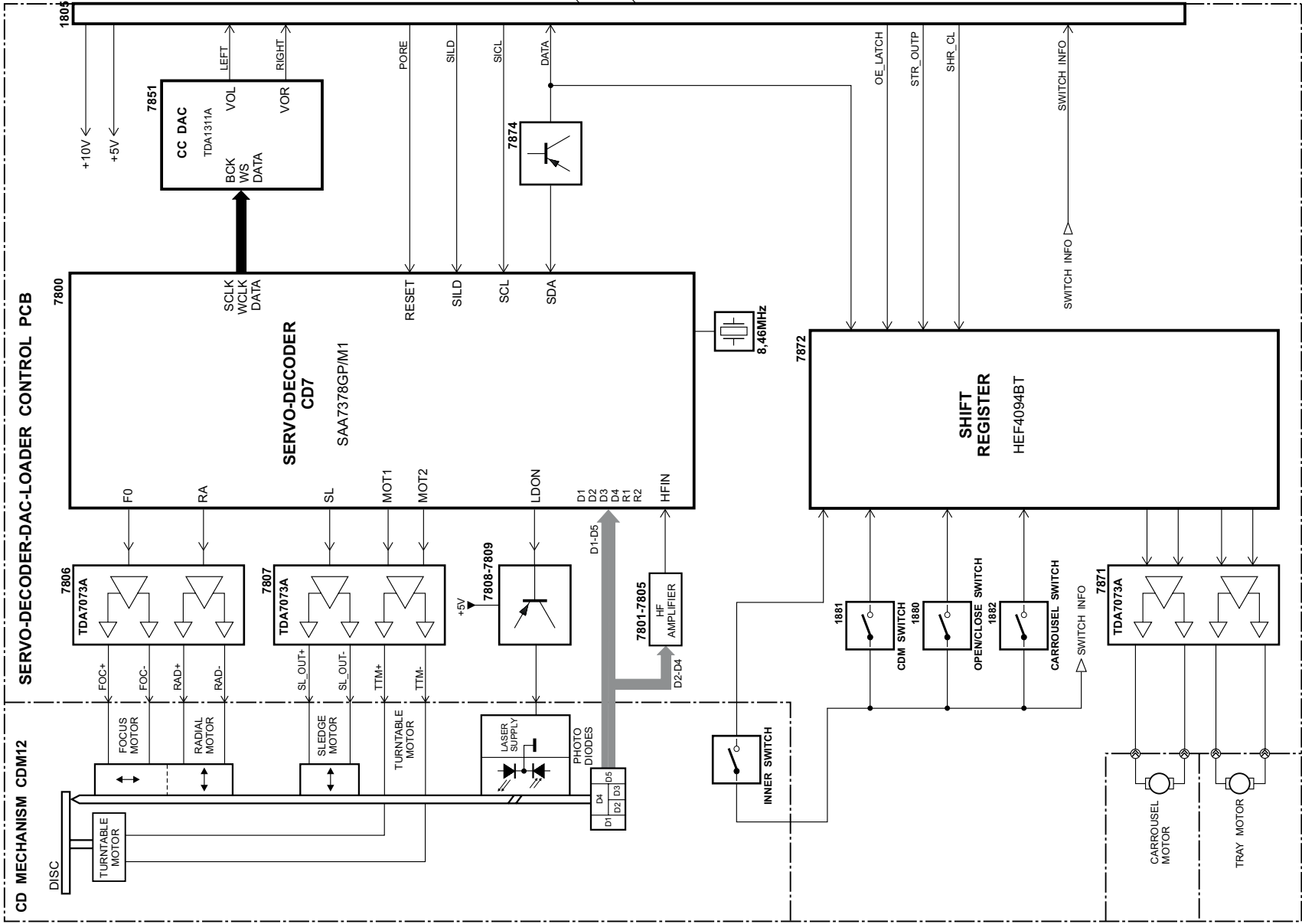
...V FM mode stereo      Signal palm  
 [---] FM      [---] FM  
 [---] AM      [---] AM  
 [---] AF

Voltagcs measured while set



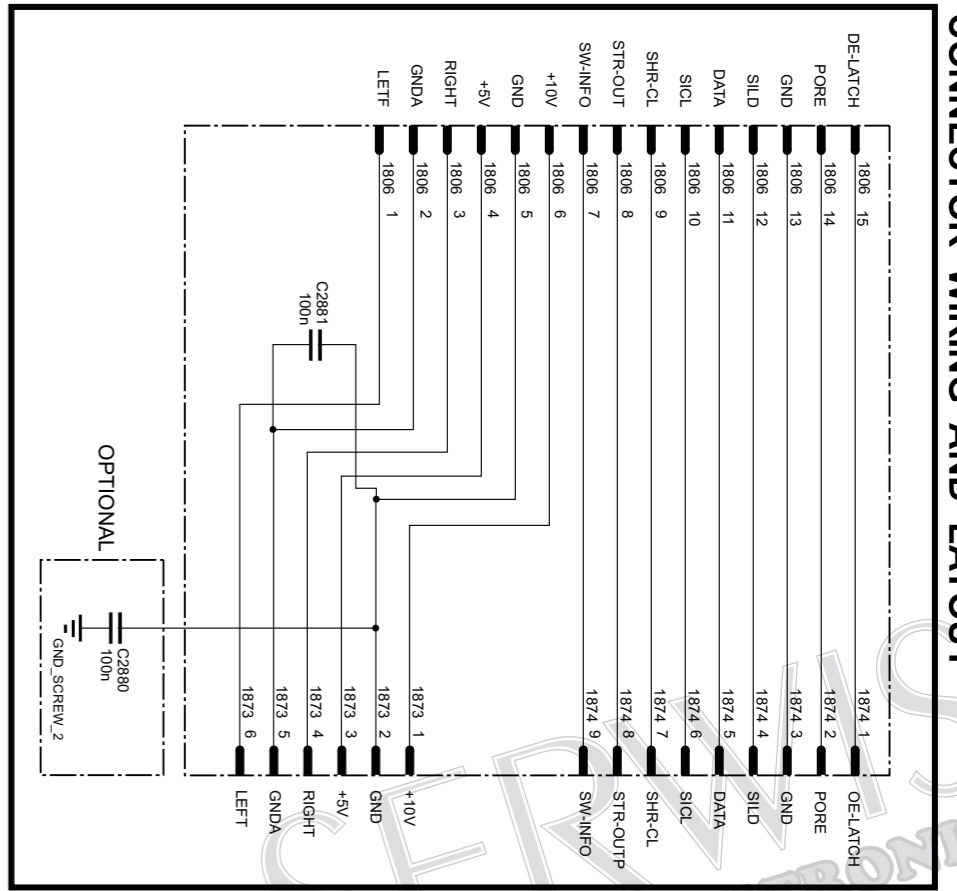
1121

# BLOCK DIAGRAM

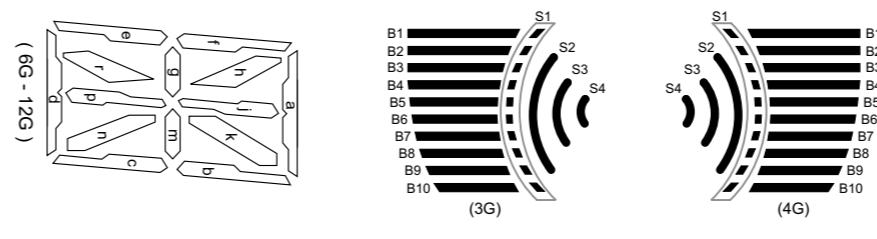


SEK  
ELEKTRONIKA

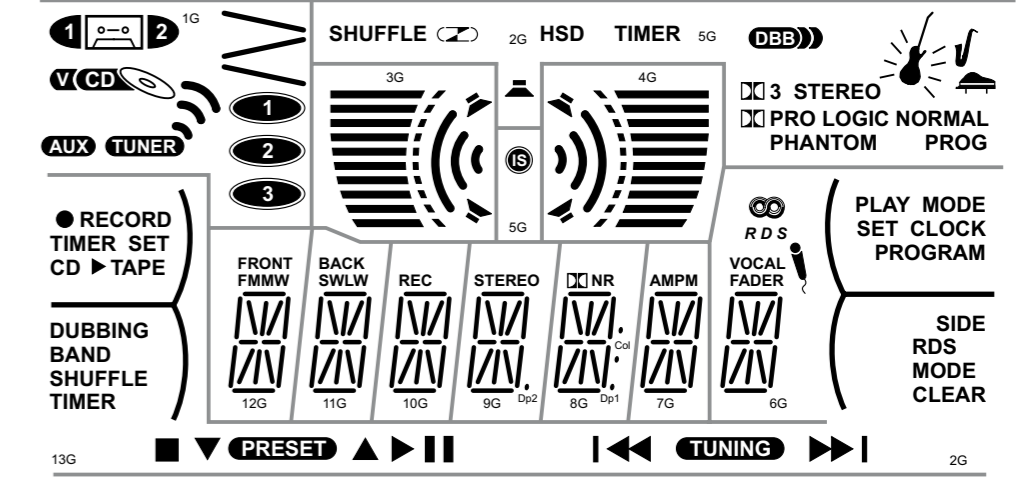
CONNECTOR WIRING AND LAYOUT



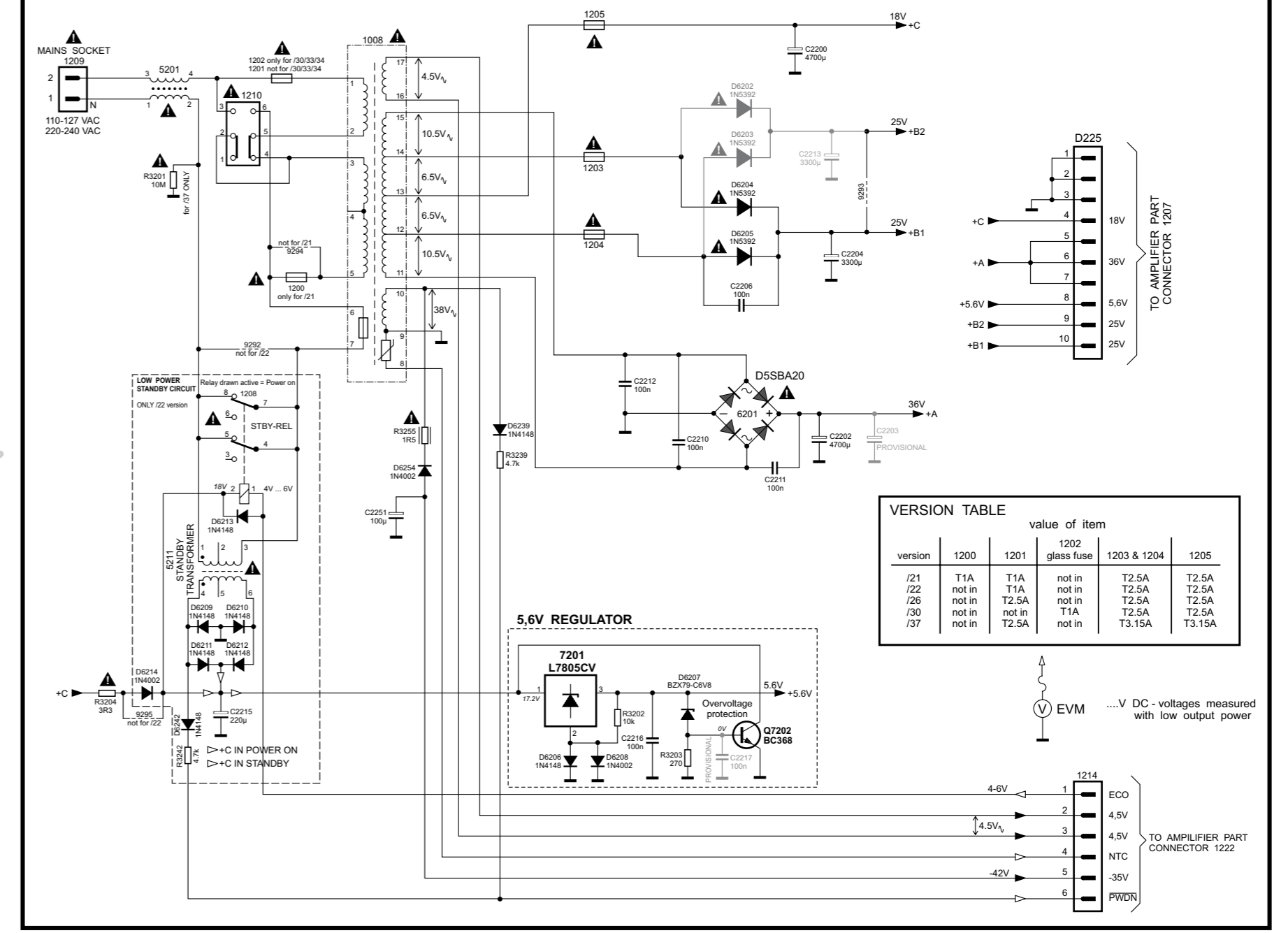
P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16
1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G			
SHUFFLE	HSD	TIMER	RECORD	TIMER SET	CD-TAPE	DUBBING	STEREO	AMP	NR	STEREO	REC	BACK SW	FRONT FM		
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16



LCD DISPLAY PIN CONNECTIONS

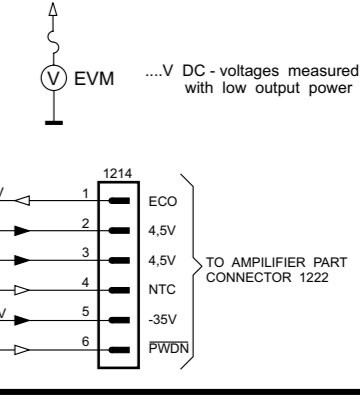


SUPPLY PART

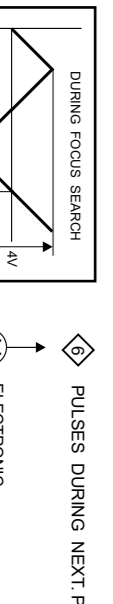
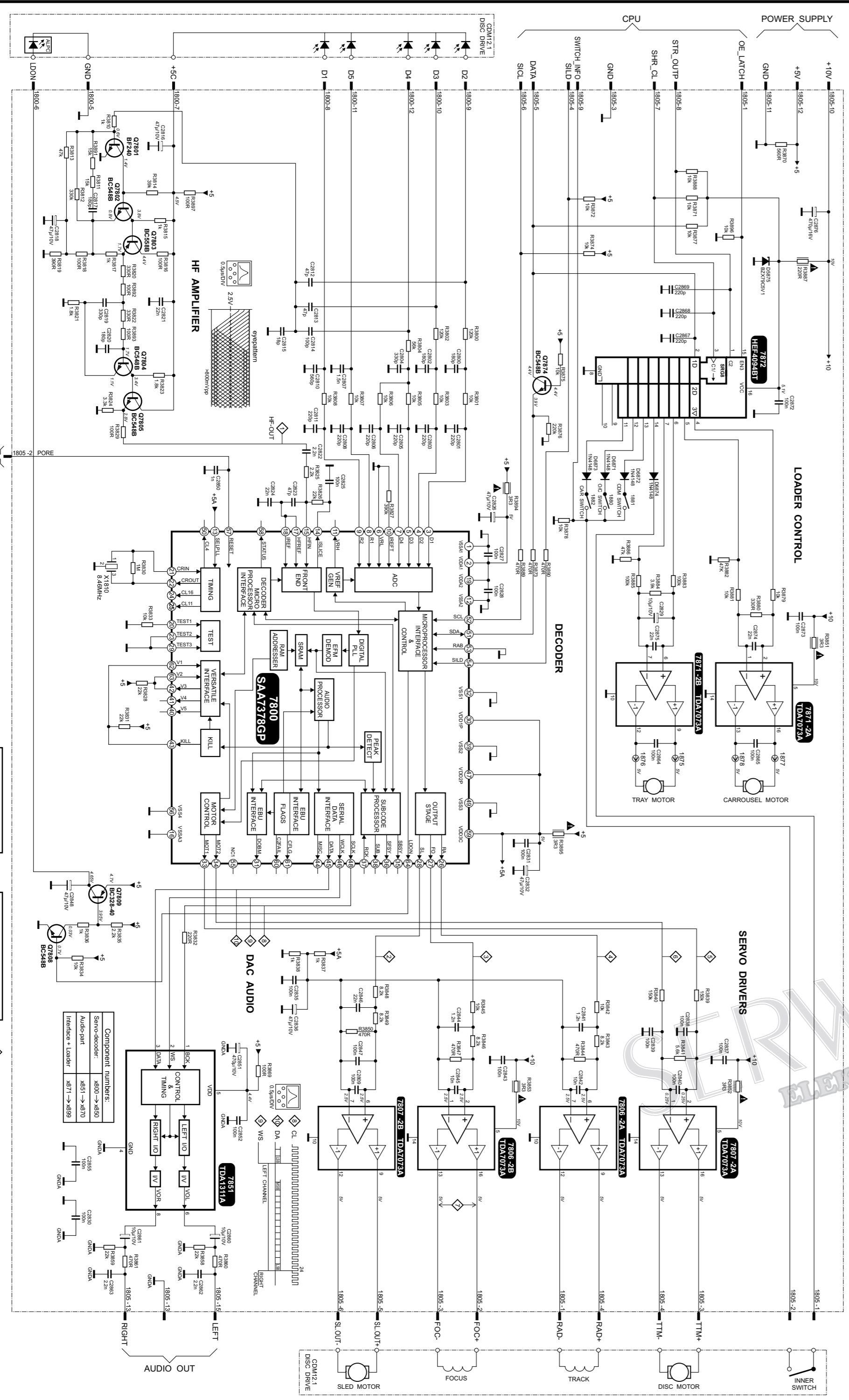


VERSION TABLE

version	1200	1201	1202	1203 & 1204	1205
/21	T1A	T1A	not in	T2.5A	T2.5A
/22	not in	T1A	not in	T2.5A	T2.5A
/26	not in	T2.5A	not in	T2.5A	T2.5A
/30	not in	not in	not in	T1A	T2.5A
/37	not in	T2.5A	not in	not in	T3.15A



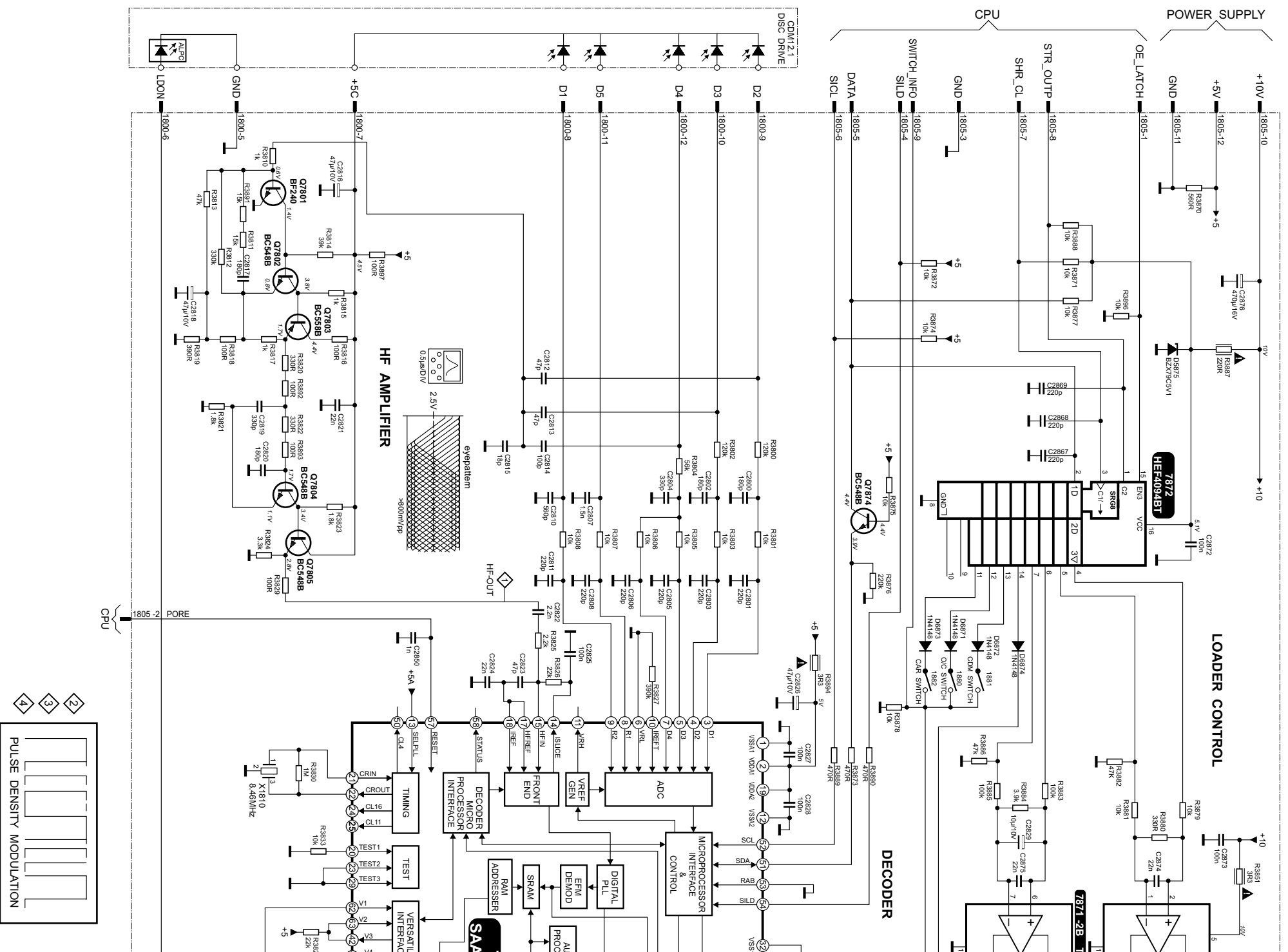
CDC3 CIRCUIT



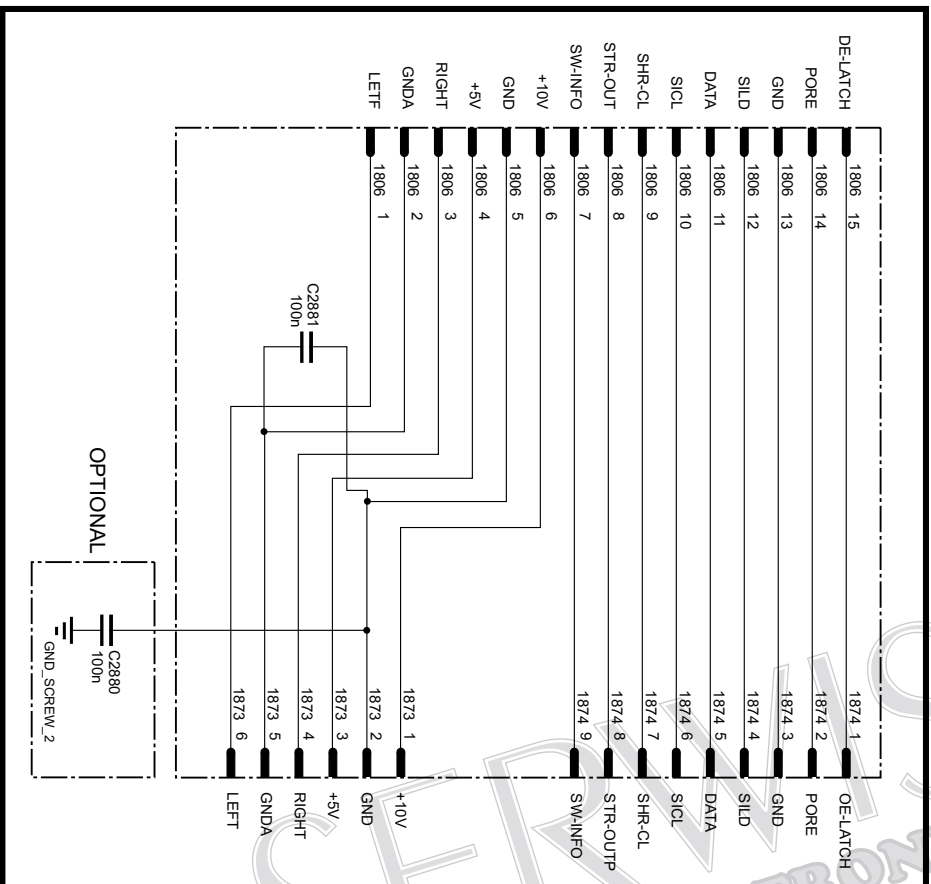
DC VOLTAGES MEASURED IN PLAY MODE



# CDC-3 CIRCUIT

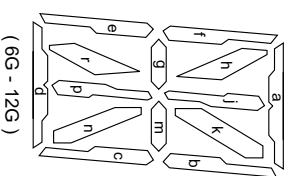
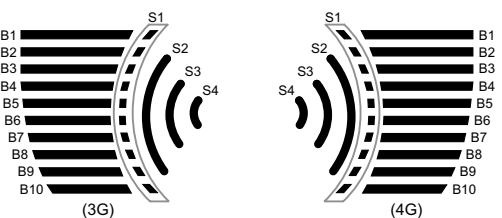
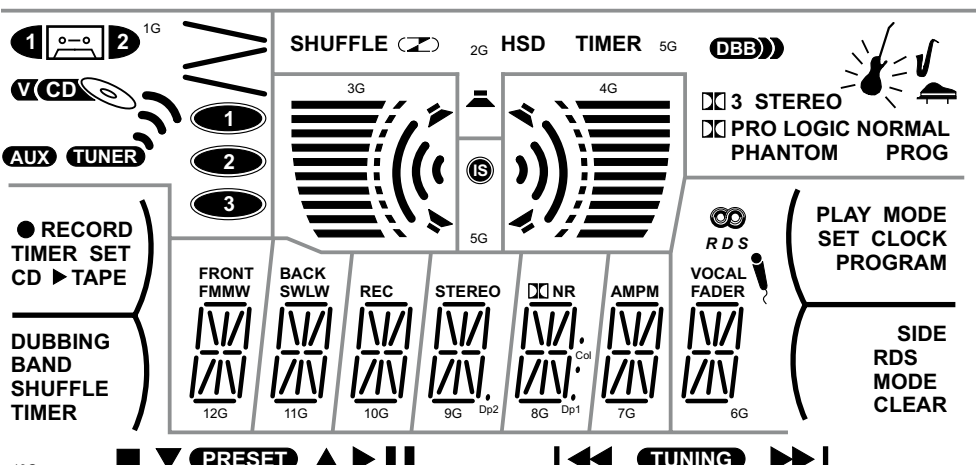


# CONNECTOR WIRING AND LAYOUT

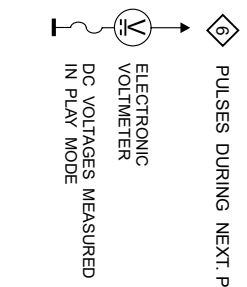
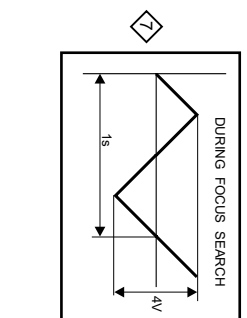
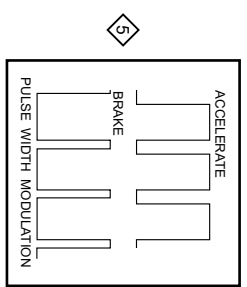
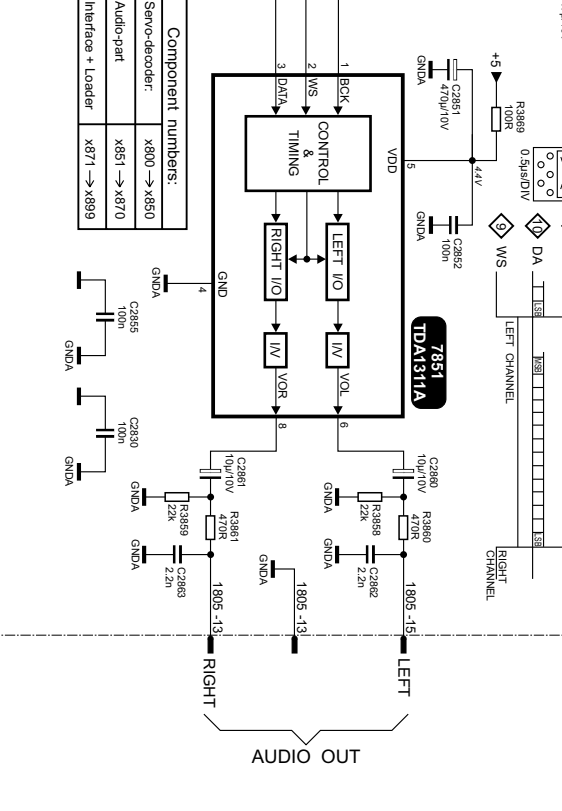
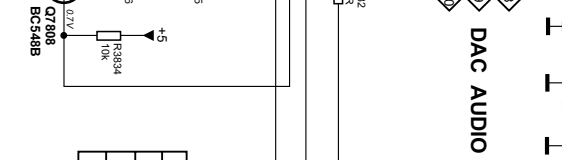
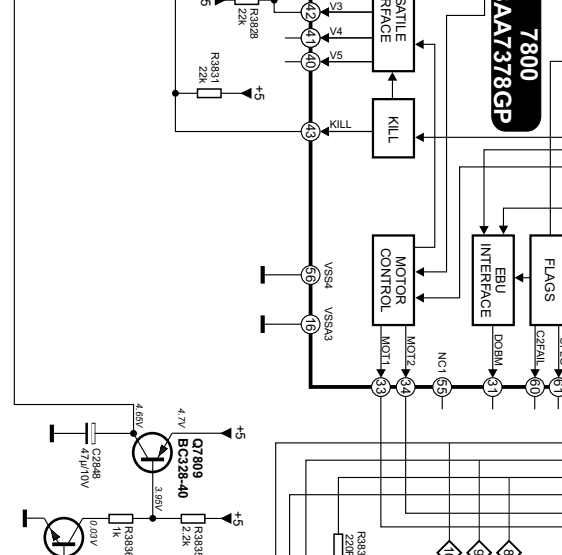
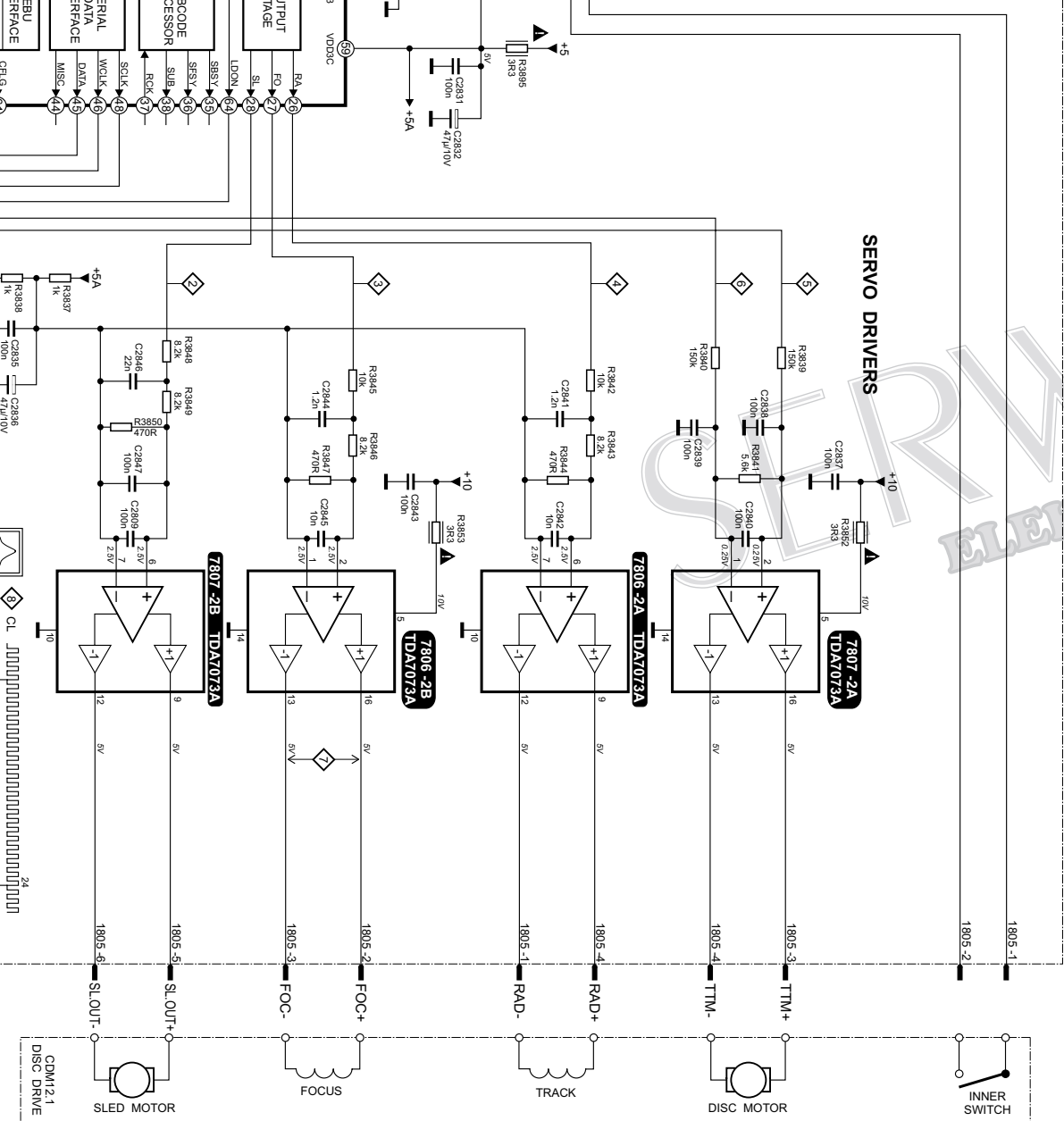
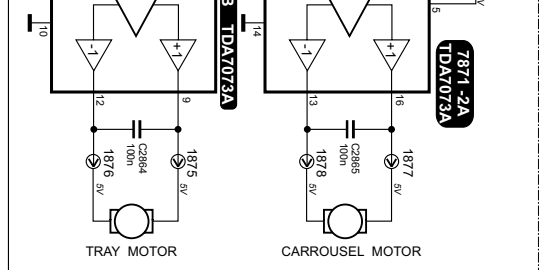


	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G
P1		SHUFFLE	B1	B1		a	a	a	a	a	a	a	● RECORD
P2		)	B2	B2	○	b	b	b	b	b	b	b	● TIMER SET
P3		(	B3	B3	TIMER	f	f	f	f	f	f	f	CD ▶ TAPE
P4		⌵	B4	B4		h	h	h	h	h	h	h	DUBBING
P5		HSD	B5	B5		k	k	k	k	k	k	k	BAND
P6			B6	B6		j, p	j, p	j, p	j, p	j, p	j, p	j, p	SHUFFLE
P7			B7	B7		g	g	g	g	g	g	g	TIMER
P8		SET CLOCK	B8	B8		m	m	m	m	m	m	m	PROGRAM
P9		PROGRAM	B9	B9		e	e	e	e	e	e	e	PRESET
P10		SIDE	B10	B10		c	c	c	c	c	c	c	SHUFFLE
P11		RDS MODE	S1	S1		n	n	n	n	n	n	n	SHUFFLE
P12		CLEAR	S4	S4		r	r	r	r	r	r	r	CD ▶ TAPE
P13			S3	S3		d	d	d	d	d	d	d	DUBBING
P14			S2	S2		r	r	r	r	r	r	r	BAND
P15			S2	S2		d	d	d	d	d	d	d	SHUFFLE
P16			S2	S2		d	d	d	d	d	d	d	SHUFFLE

# LCD DISPLAY PIN CONNECTIONS



(9G - 12G)

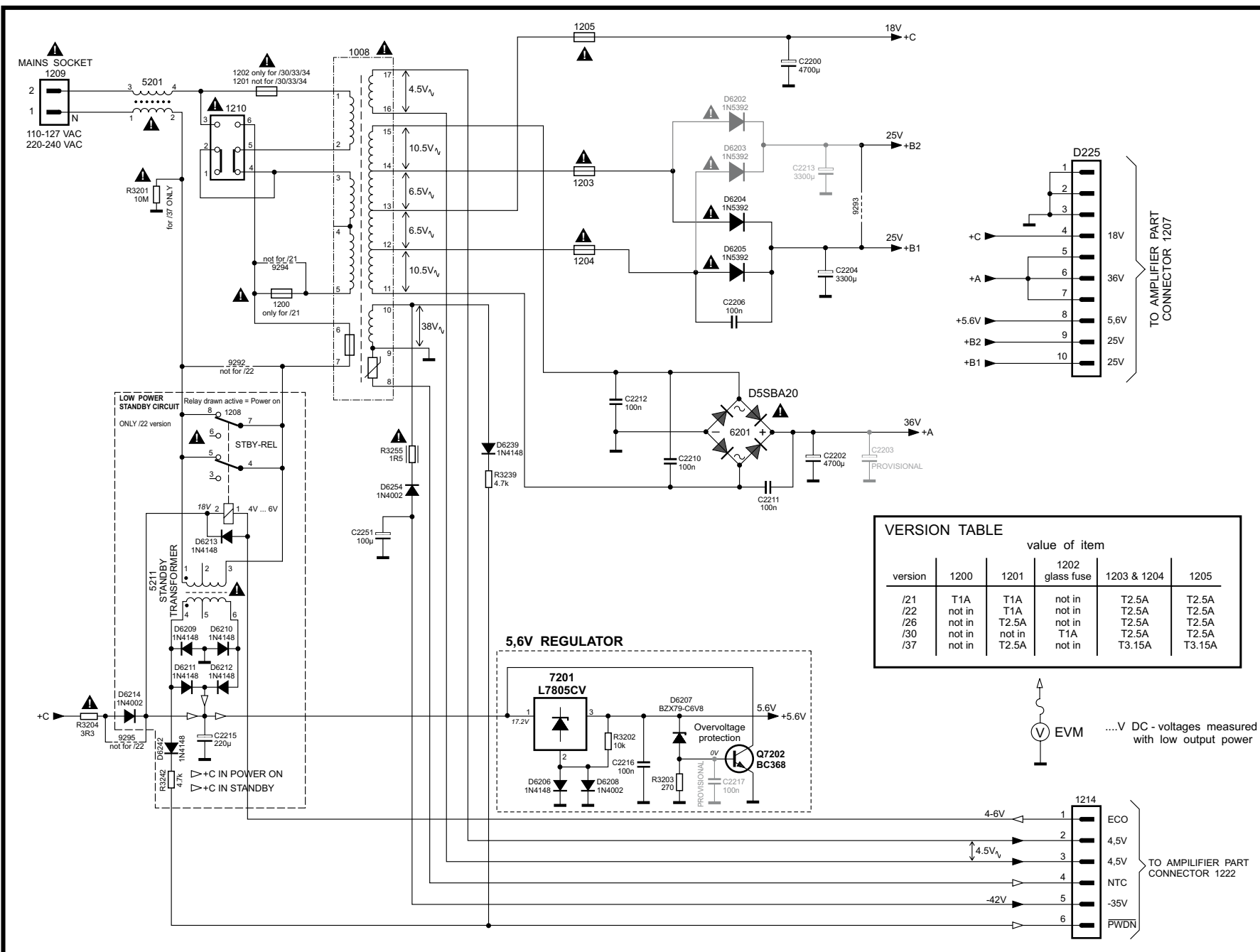


PULSES DURING NEXT. PREVIOUS. STOP

ELECTRONIC VOLTMETER IN PLAY MODE



# SUPPLY PART

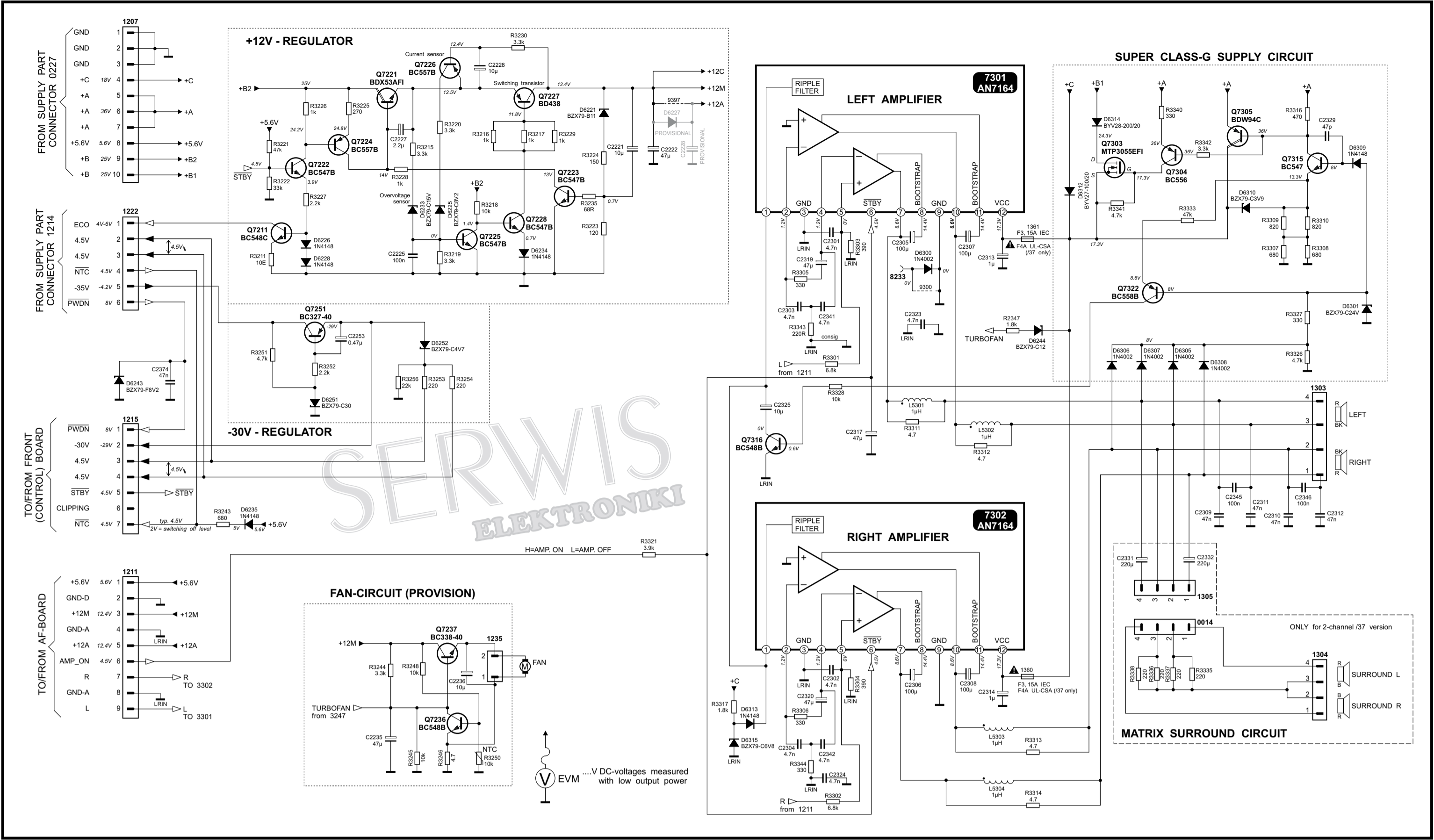


VERSION TABLE

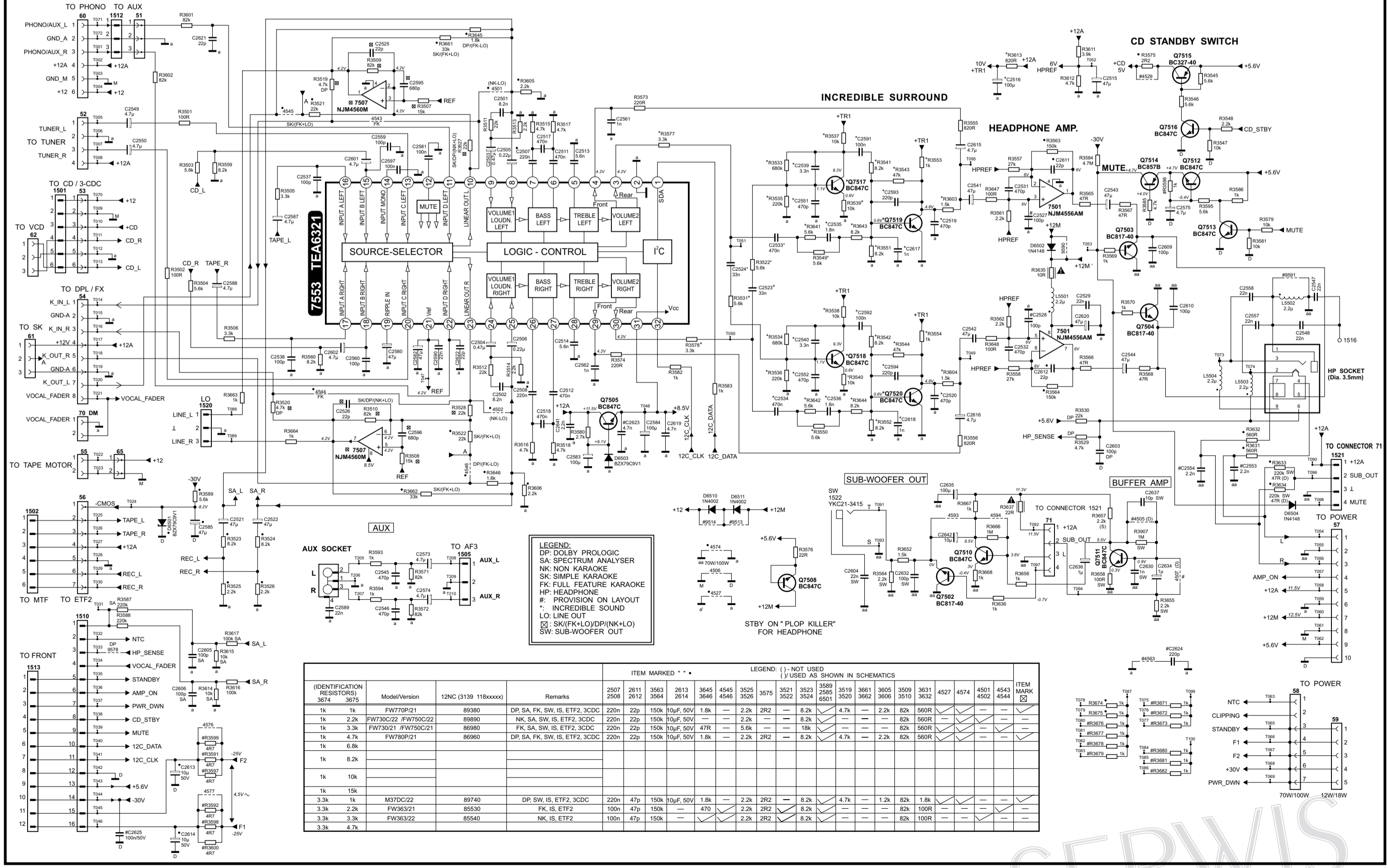
version	1200	1201	1202 glass fuse	1203 & 1204	1205
/21	T1A	T1A	not in	T2.5A	T2.5A
/22	not in	T1A	not in	T2.5A	T2.5A
/26	not in	T2.5A	not in	T2.5A	T2.5A
/30	not in	not in	T1A	T2.5A	T2.5A
/37	not in	T2.5A	not in	T3.15A	T3.15A

EVM ...V DC - voltages measured with low output power

**AMPLIFIER PART LEFT/RIGHT**

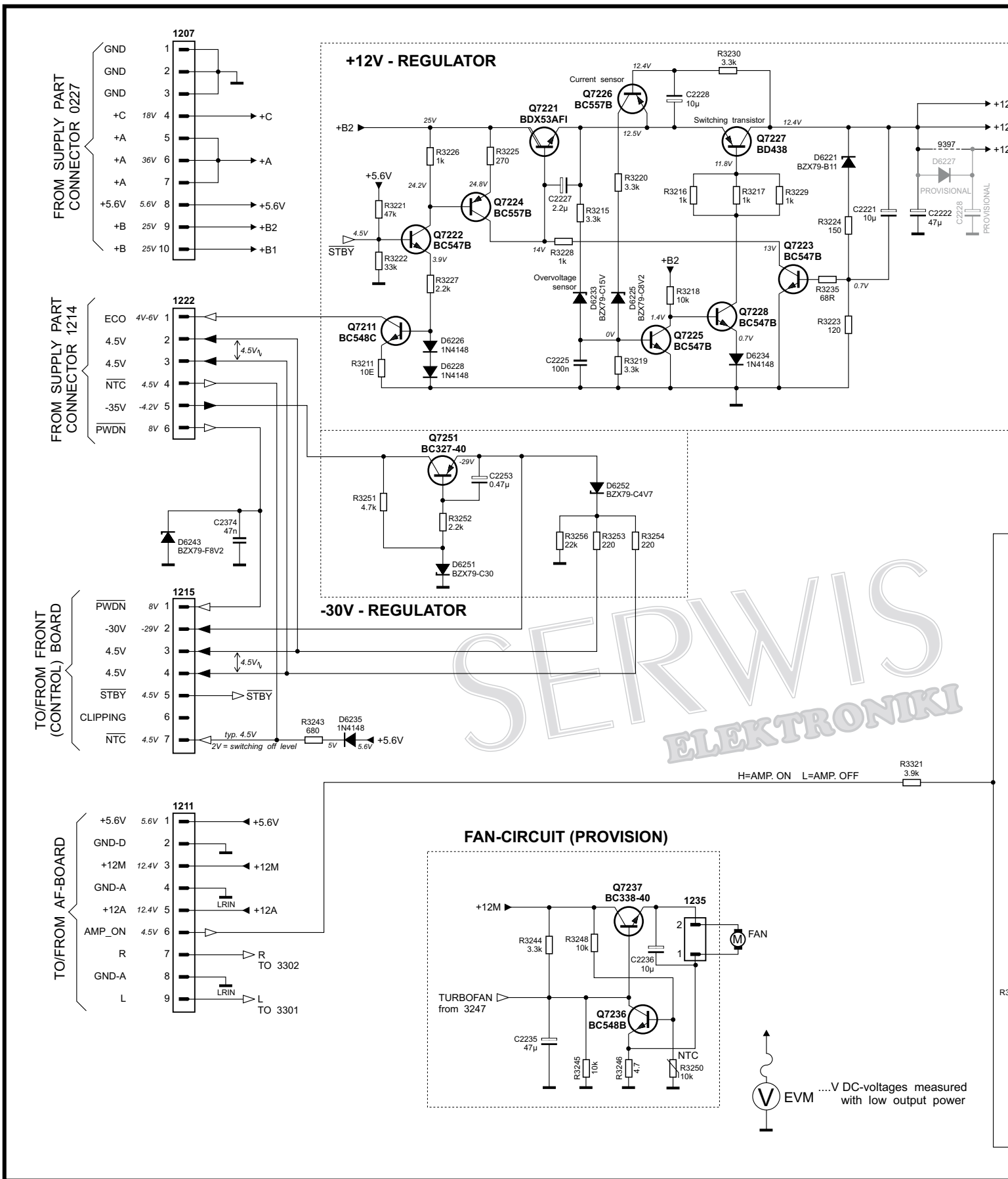


**AF3 CIRCUIT**

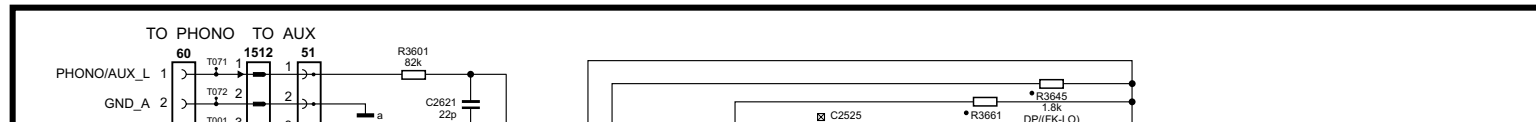


(IDENTIFICATION RESISTORS)	Model/Version	12NC (3139 118xxxx)	Remarks	2507	2611	3563	2613	3564	3565	4545	4546	3525	3575	3522	3523	3589	3595	3619	3661	3605	3509	3631	4527	4574	4501	4543	4544	ITEM MARK
1k 1k	FW770P/21	89380	DP, SA, FK, SW, IS, ETF2, 3CDC	220n	22p	150k	100k	50V	1.8k	—	2.2k	2R2	—	8.2k	—	—	—	—	2.2k	82k	560R	—	—	—	—	—	—	
1k 2.2k	FW730C/22	89890	NK, SA, SW, IS, ETF2, 3CDC	220n	22p	150k	100k	50V	1.8k	—	2.2k	—	—	8.2k	—	—	—	—	2.2k	82k	560R	—	—	—	—	—		
1k 3.3k	FW730C/21	86980	FK, SA, SW, IS, ETF2, 3CDC	220n	22p	150k	100k	50V	47R	—	5.6k	—	—	18k	—	—	—	—	—	—	—	—	—	—	—	—		
1k 4.7k	FW780P/21	86960	DP, SA, FK, SW, IS, ETF2, 3CDC	220n	22p	150k	100k	50V	1.8k	—	2.2k	2R2	—	8.2k	—	—	—	—	2.2k	82k	560R	—	—	—	—	—		
1k 6.8k																												
1k 8.2k																												
1k 10k																												
1k 15k																												
3.3k 1k	M37DC/22	89740	DP, SW, IS, ETF2, 3CDC	220n	47p	150k	100k	50V	1.8k	—	2.2k	2R2	—	8.2k	—	—	—	—	1.2k	82k	1.8k	—	—	—	—	—		
3.3k 2.2k	FW363/21	85530	FK, IS, ETF2	100n	47p	150k	—	—	470	—	—	—	—	8.2k	—	—	—	—	—	—	—	—	—	—	—	—		
3.3k 3.3k	FW363/22	85540	NK, IS, ETF2	100n	47p	150k	—	—	—	—	—	—	—	8.2k	—	—	—	—	—	—	—	—	—	—	—	—		
3.3k 4.7k																												

# AMPLIFIER PART LEFT/RIGHT



## AF3 CIRCUIT

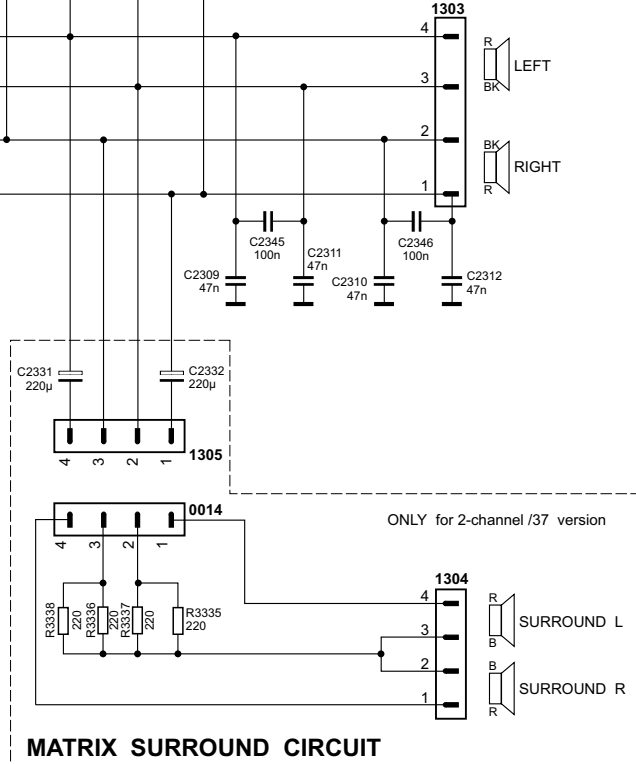
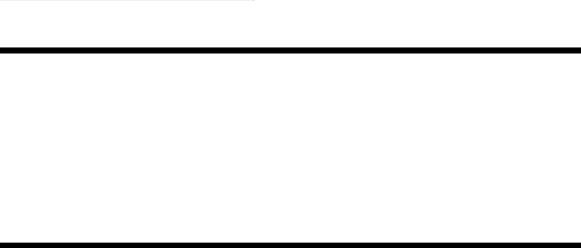
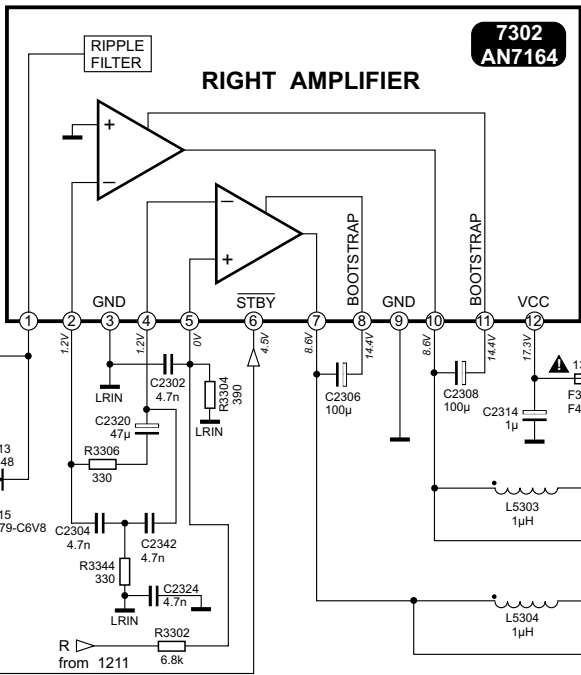
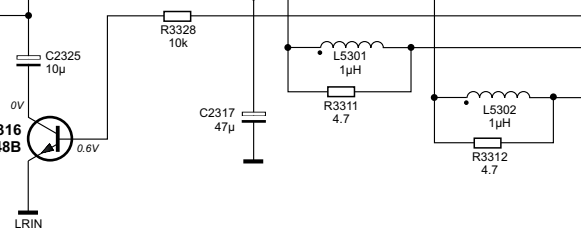
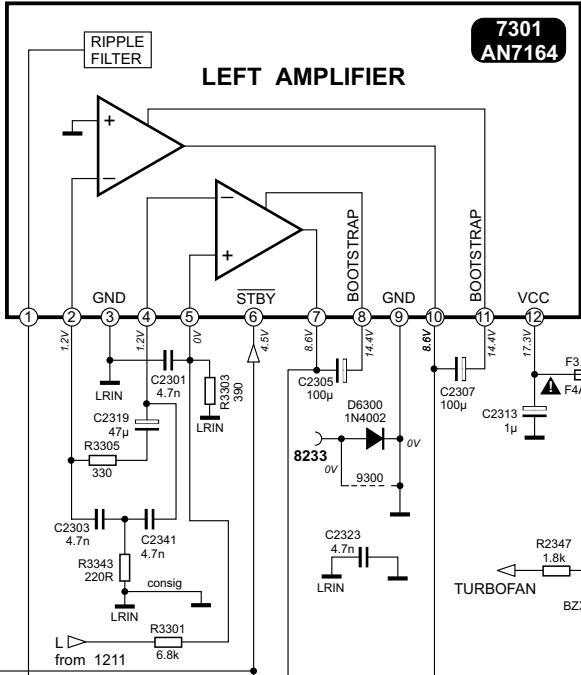
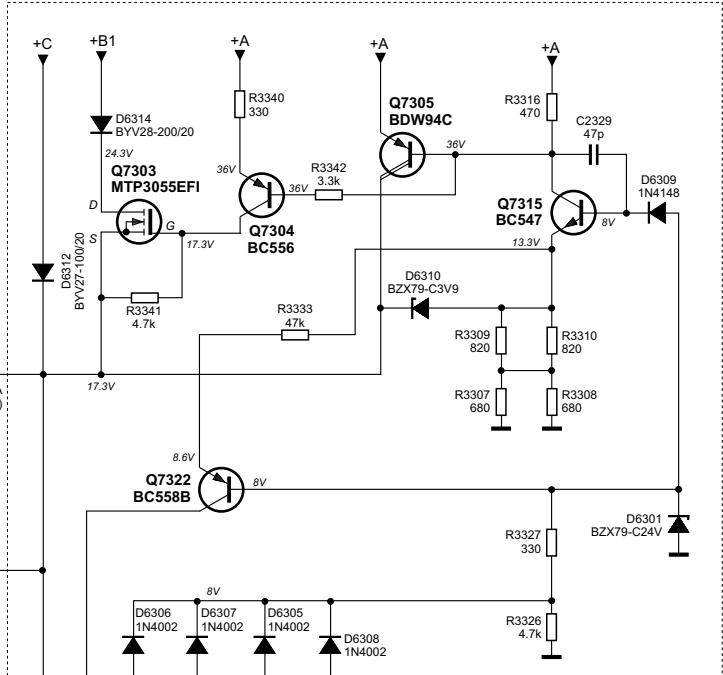




+12C  
+12M  
+12A

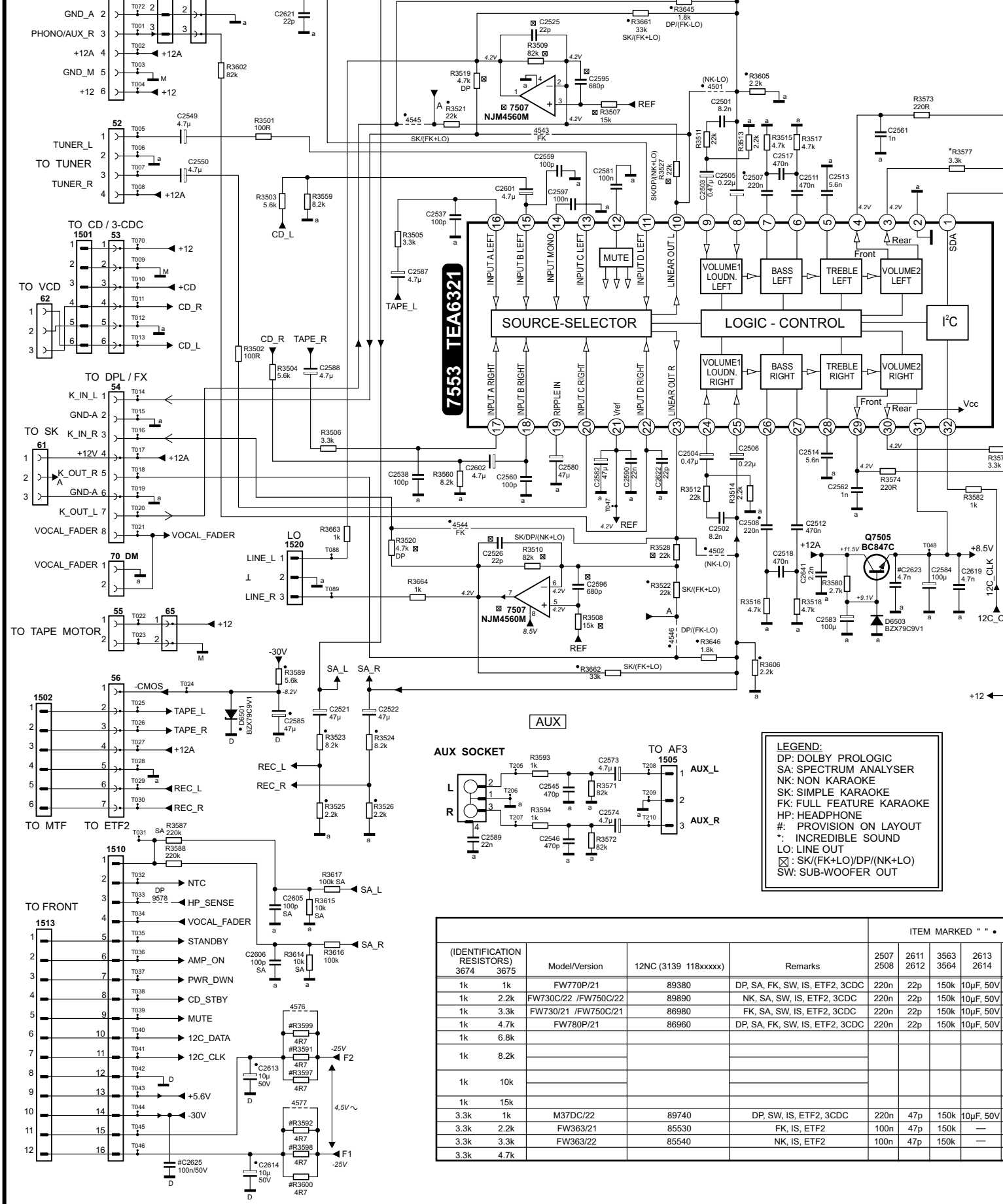
PROVISIONAL

### SUPER CLASS-G SUPPLY CIRCUIT

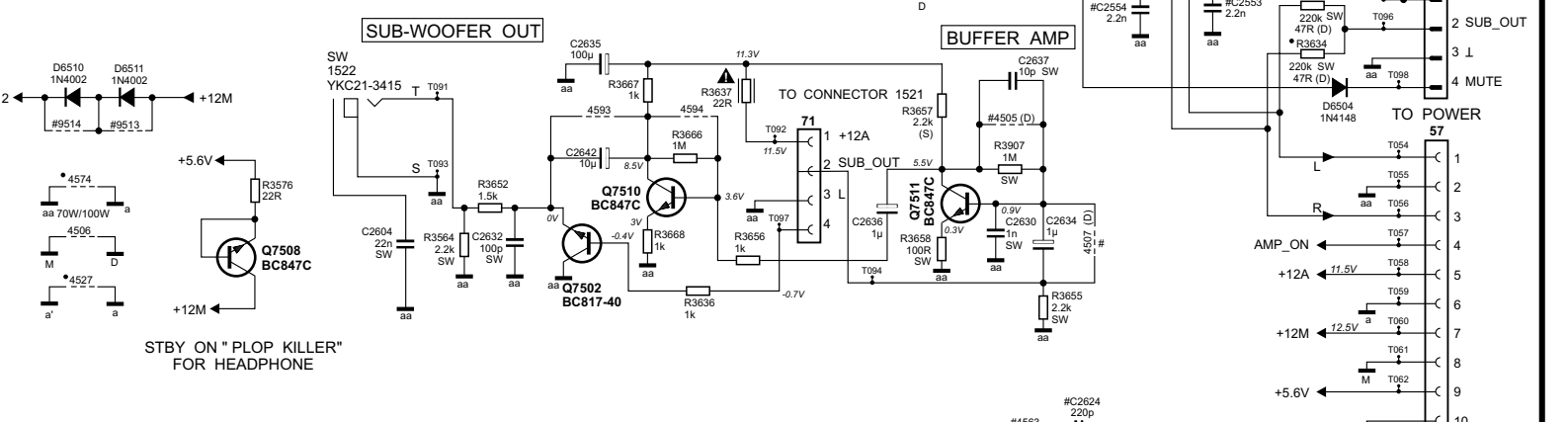
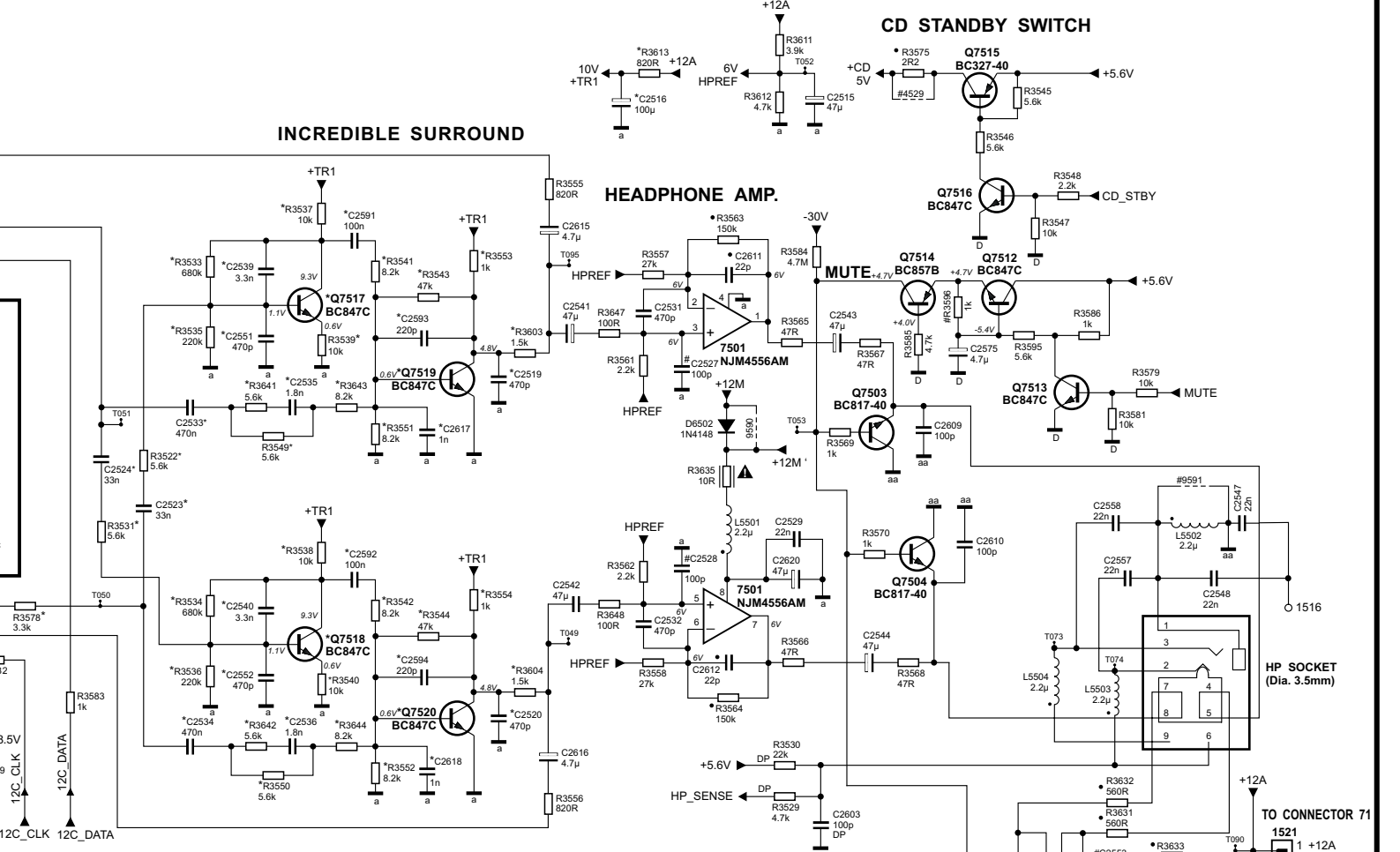


+12A

CD STANDBY SWITCH

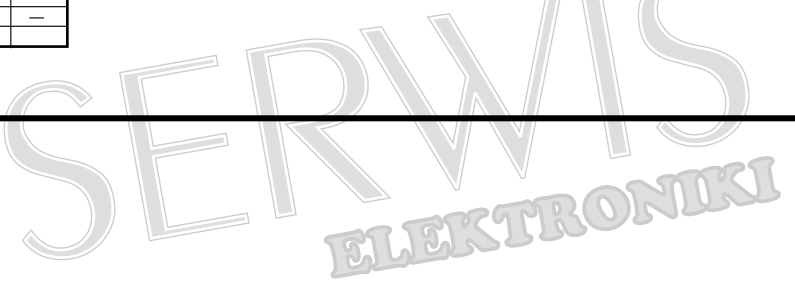
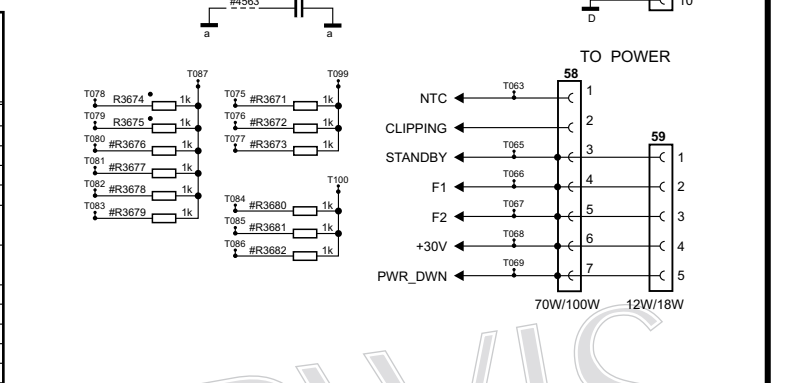


# Zestaw audio Philips FW730C/21/21M/2

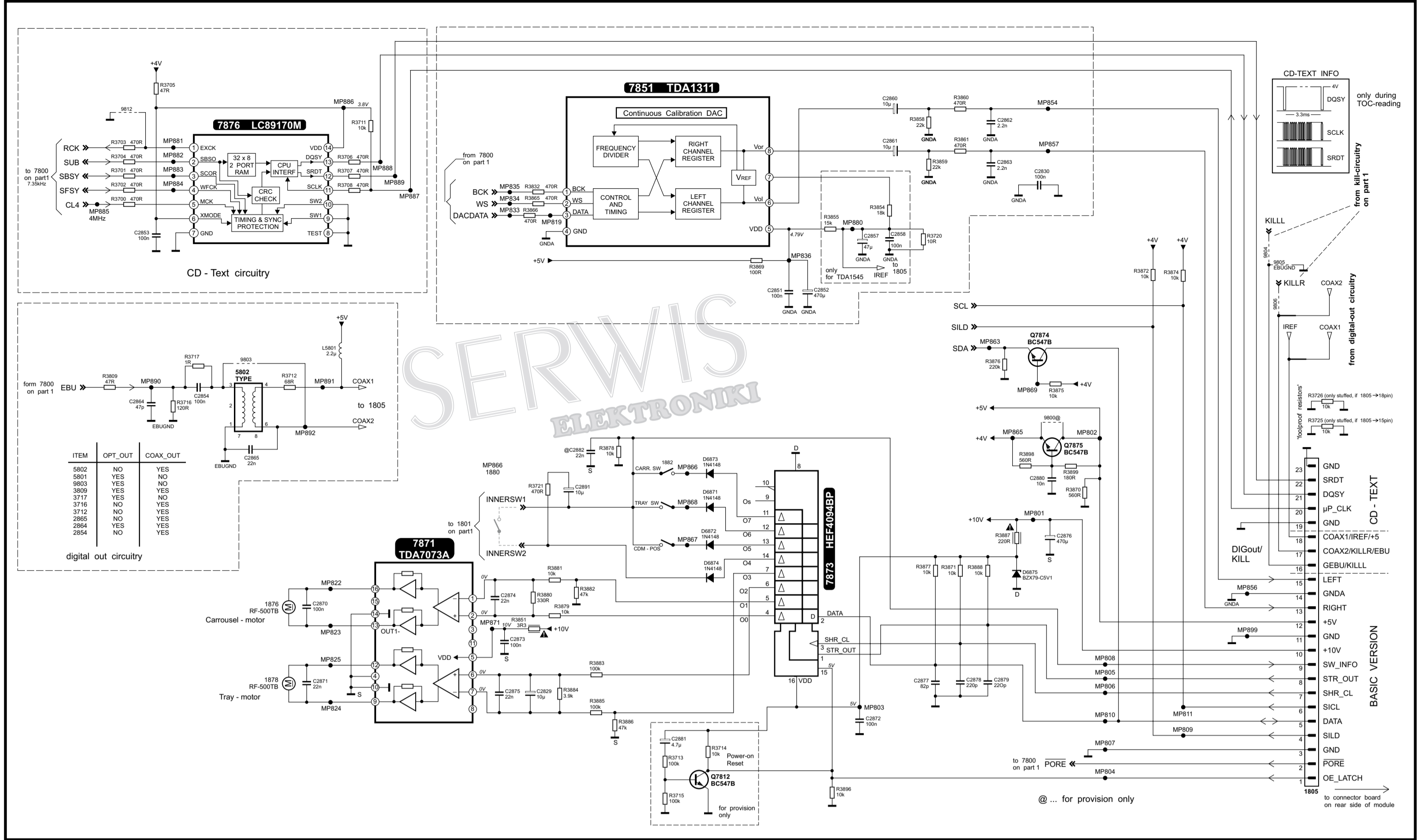


LEGEND: ( ) - NOT USED  
(/ ) USED AS SHOWN IN SCHEMATICS

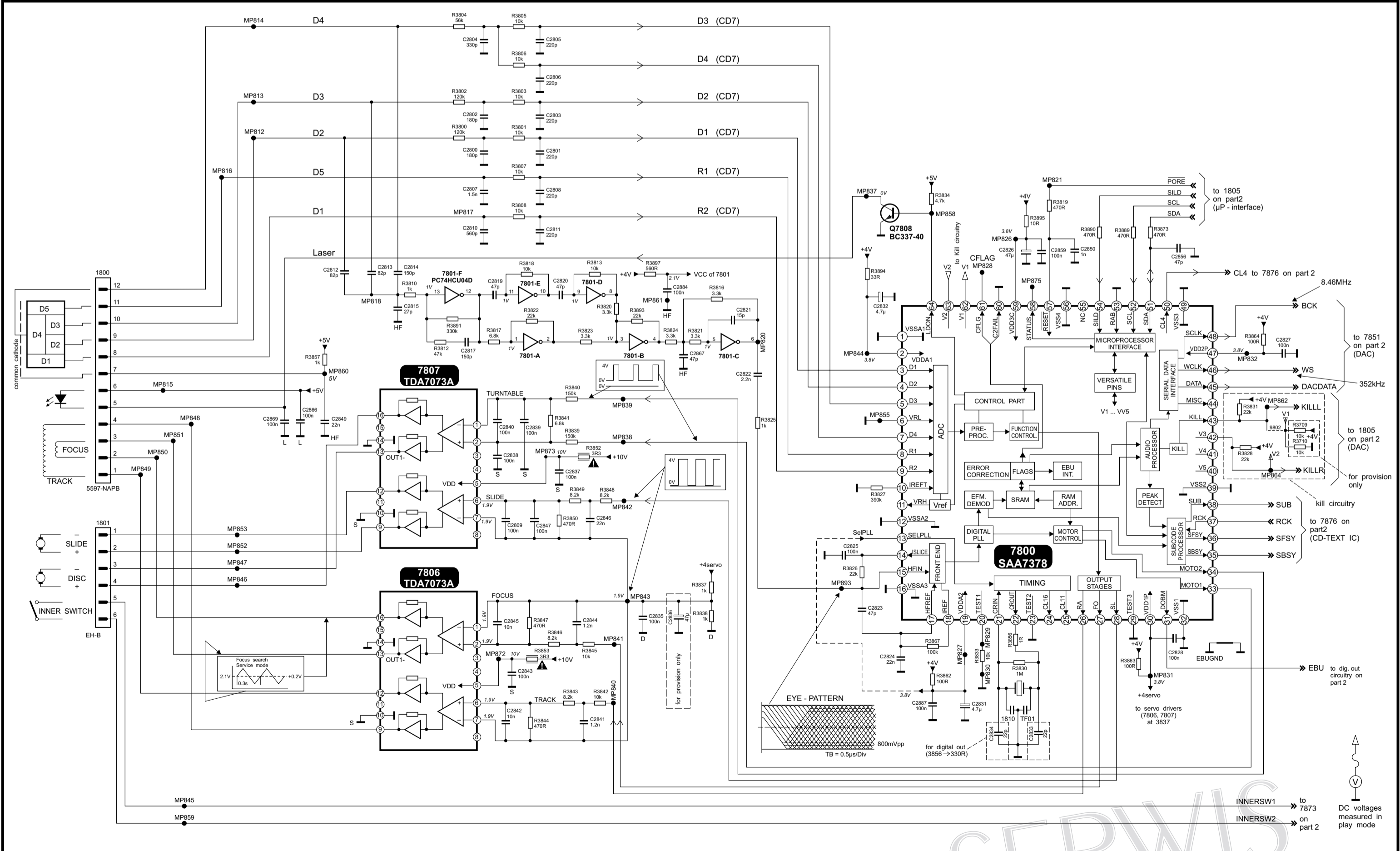
ITEM MARK	313	3645	4545	3525	3575	3521	3523	3589	3519	3661	3605	3509	3631	4527	4574	4501	4543
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	6501	4.7k	—	2.2k	82k	560R	—	—	—	—
5.0V	—	—	2.2k	—	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	47R	—	5.6k	—	—	18k	—	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	2.2k	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—
5.0V	1.8k	—	2.2k	2R2	—	8.2k	8.2k	—	—	—	—	82k	560R	—	—	—	—



Circuit Diagram Main Board part2

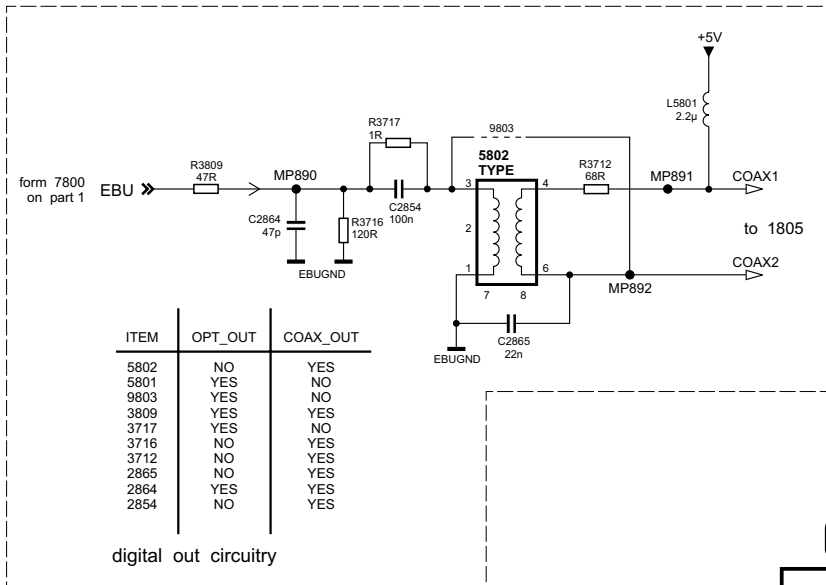
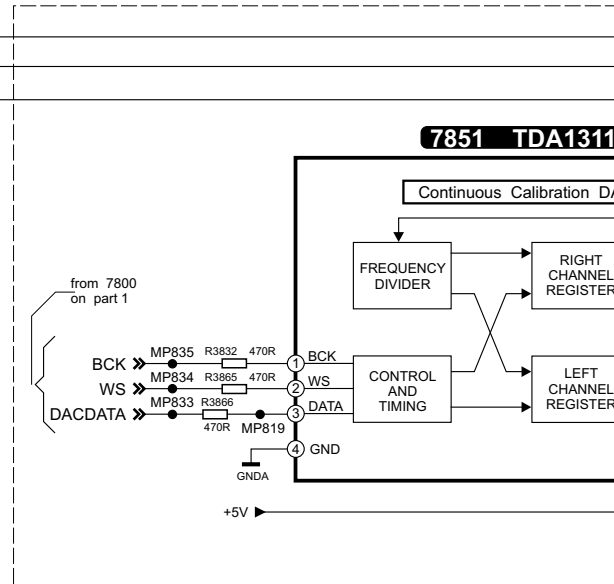
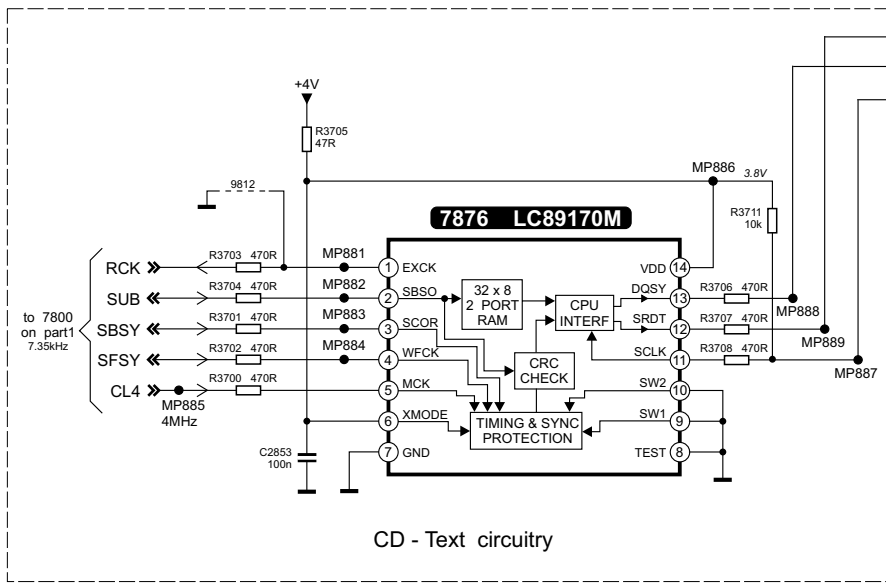


Circuit Diagram Main Board part 1

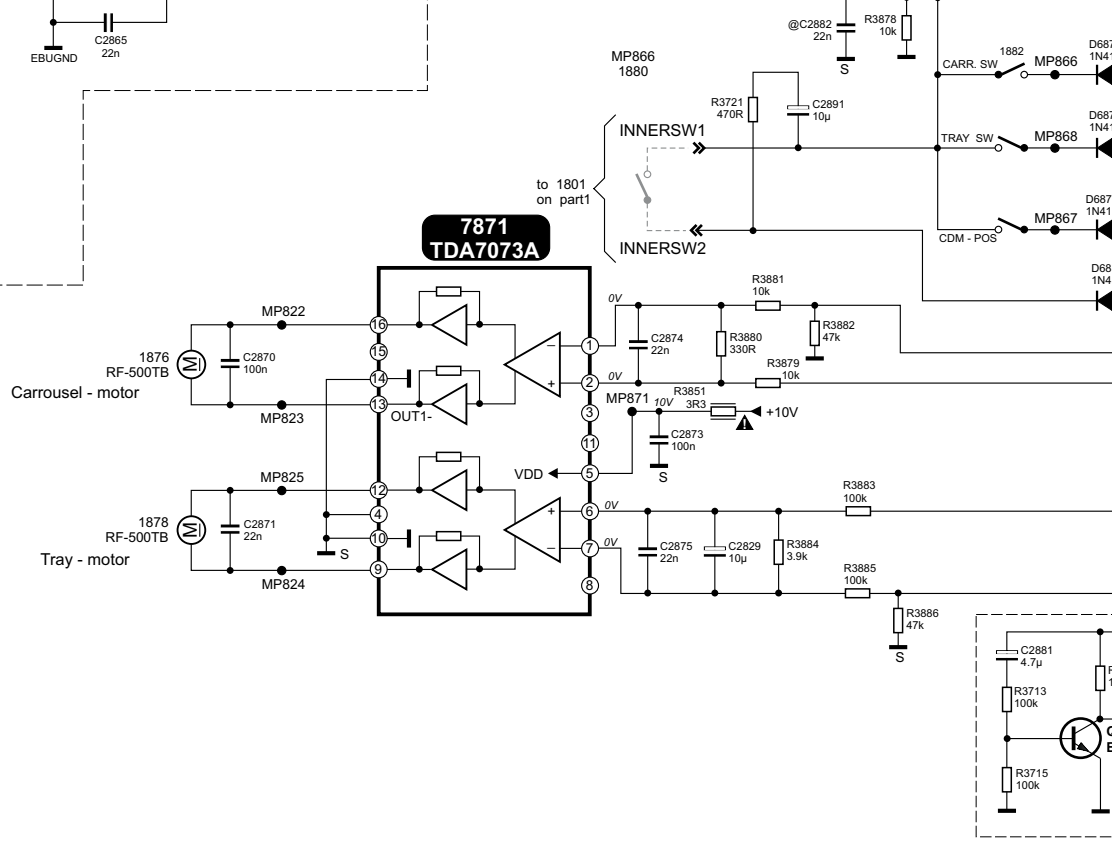




# Circuit Diagram Main Board part2

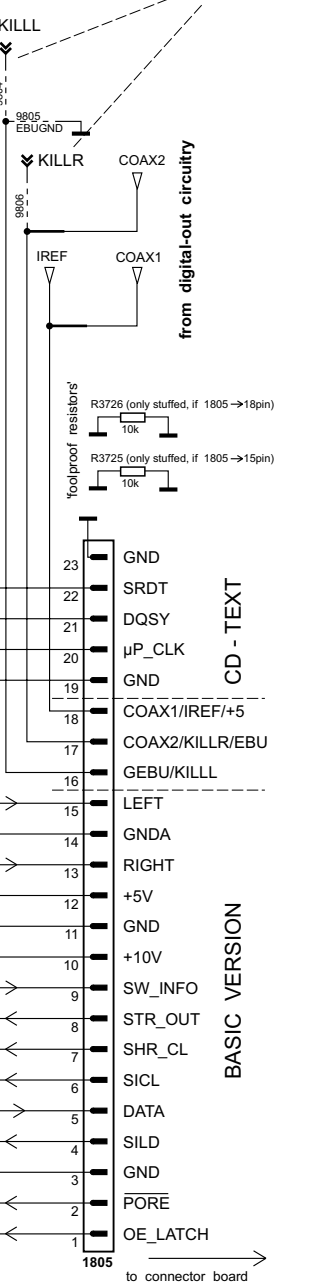
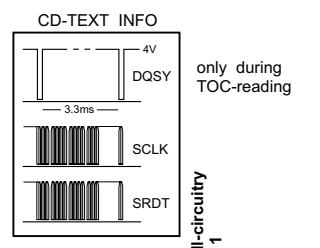
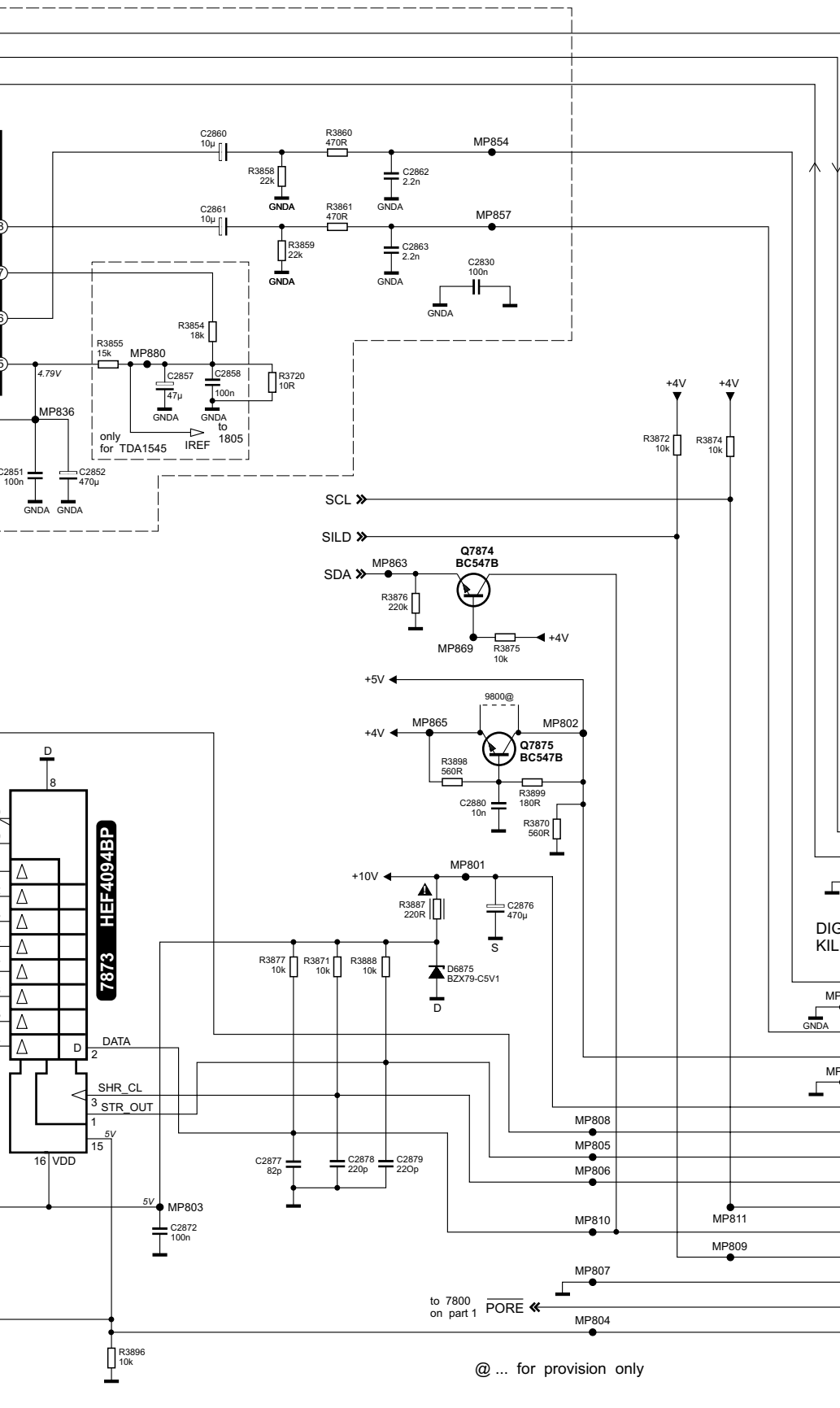
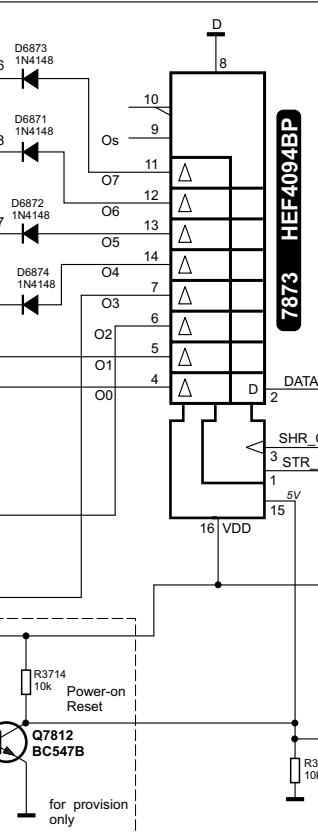
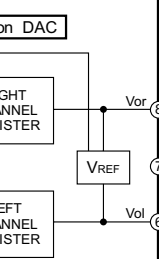


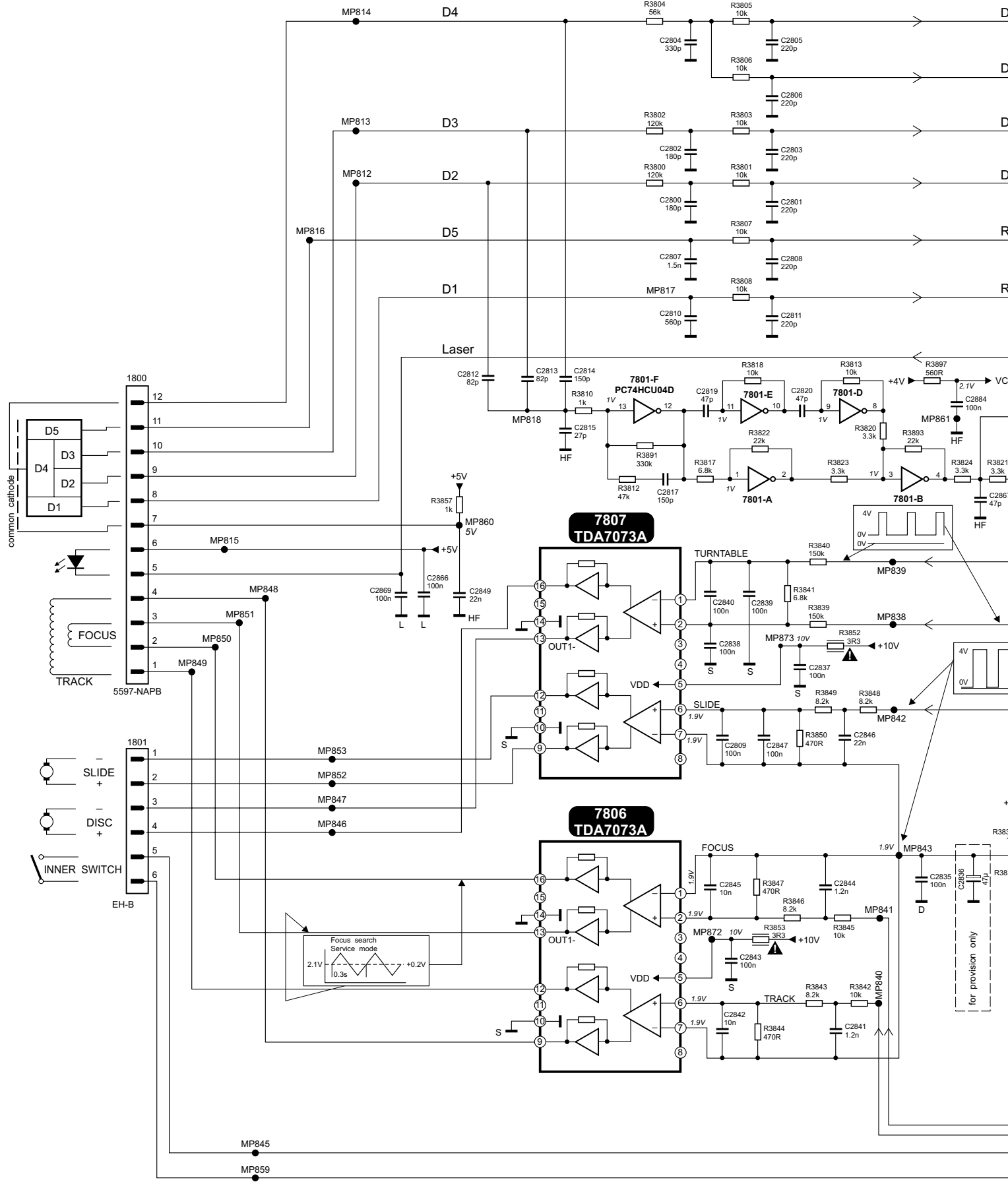
SERVICES  
ELEKTRONIK



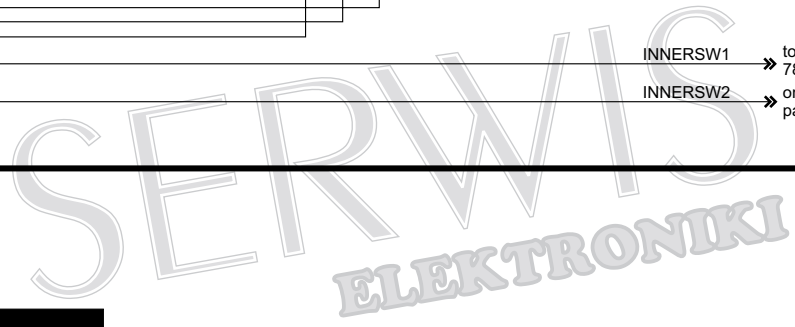
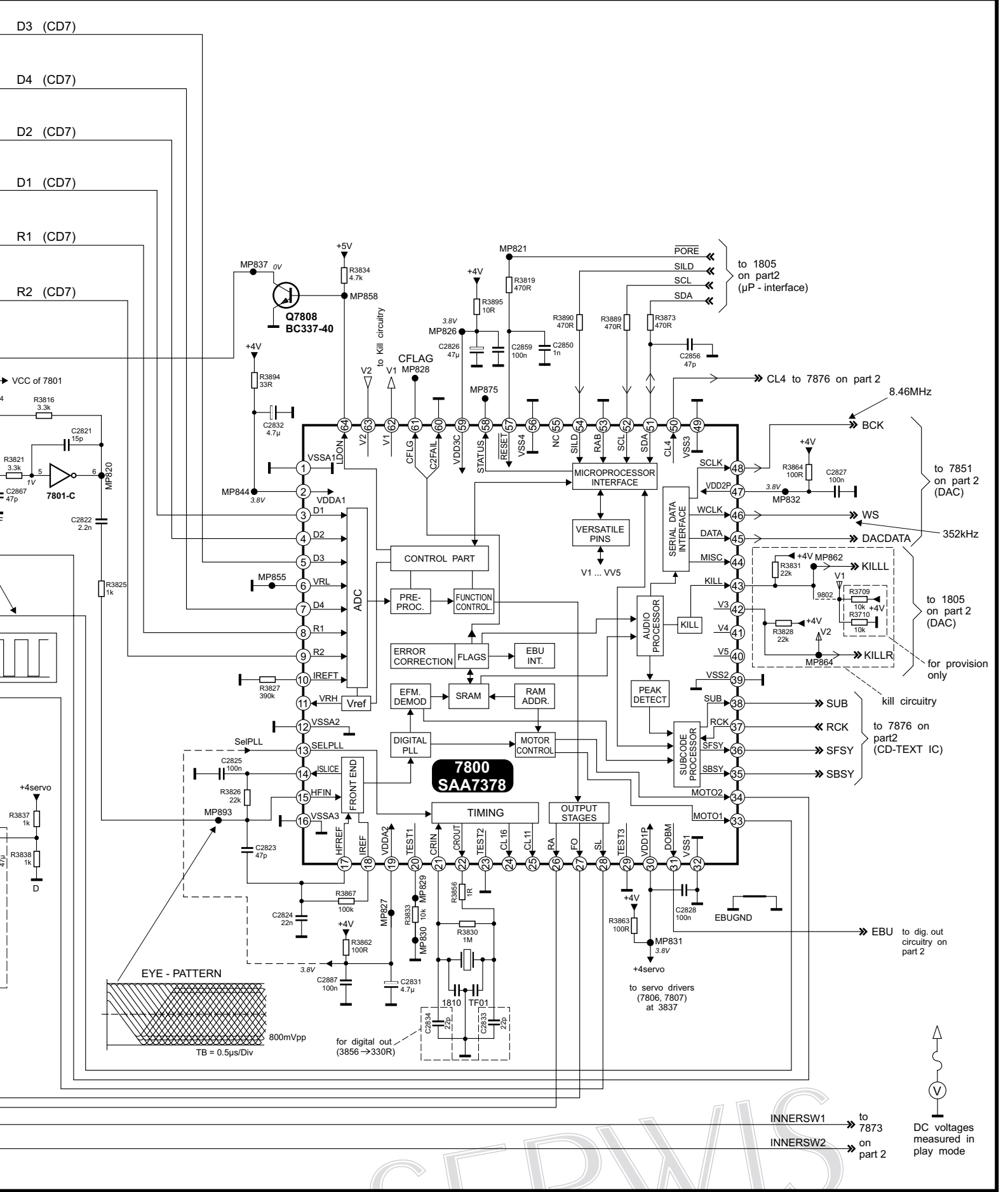
# Circuit Diagram Main Board part 1

311





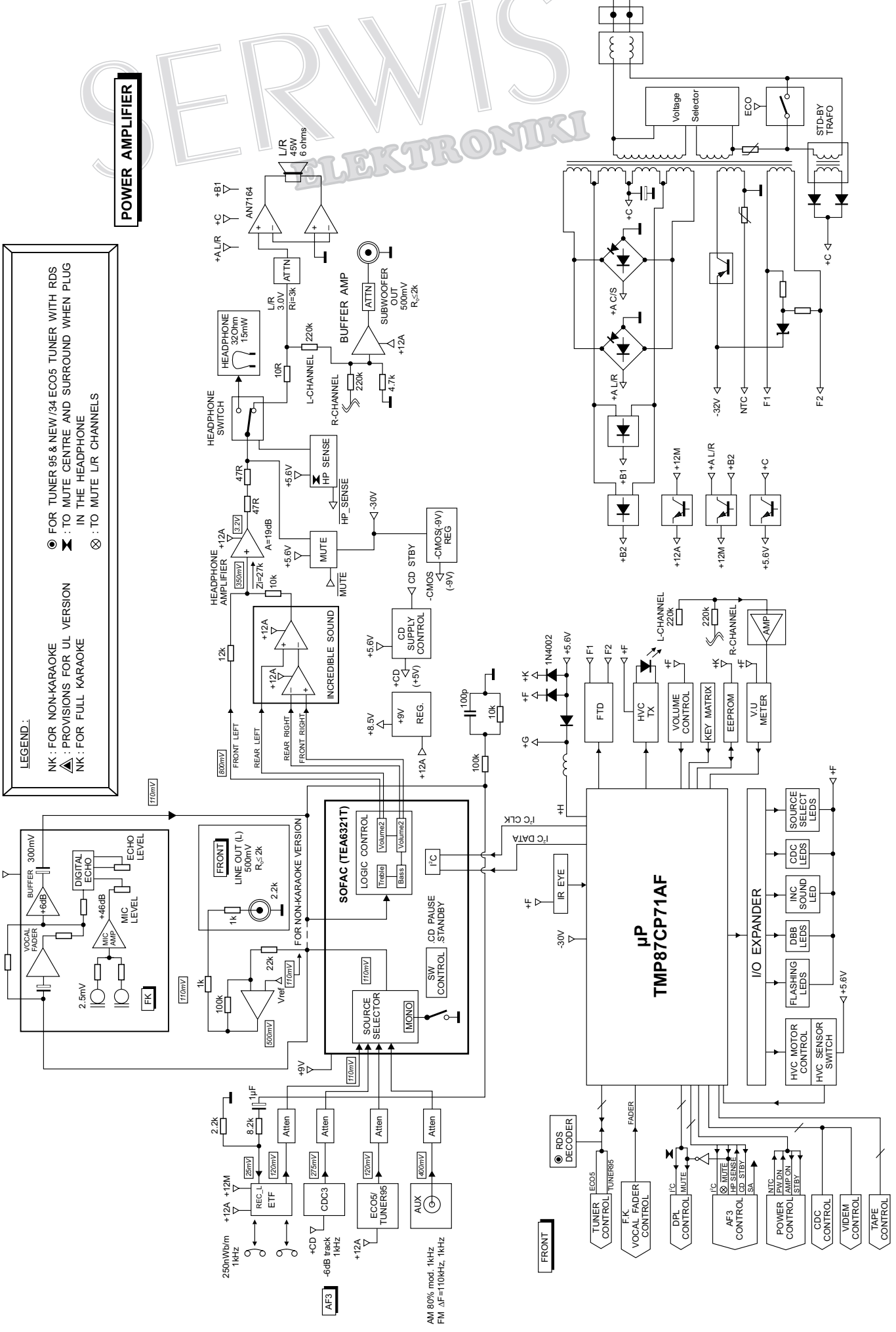
# Zestaw audio Philips FW730C/21/21M/22





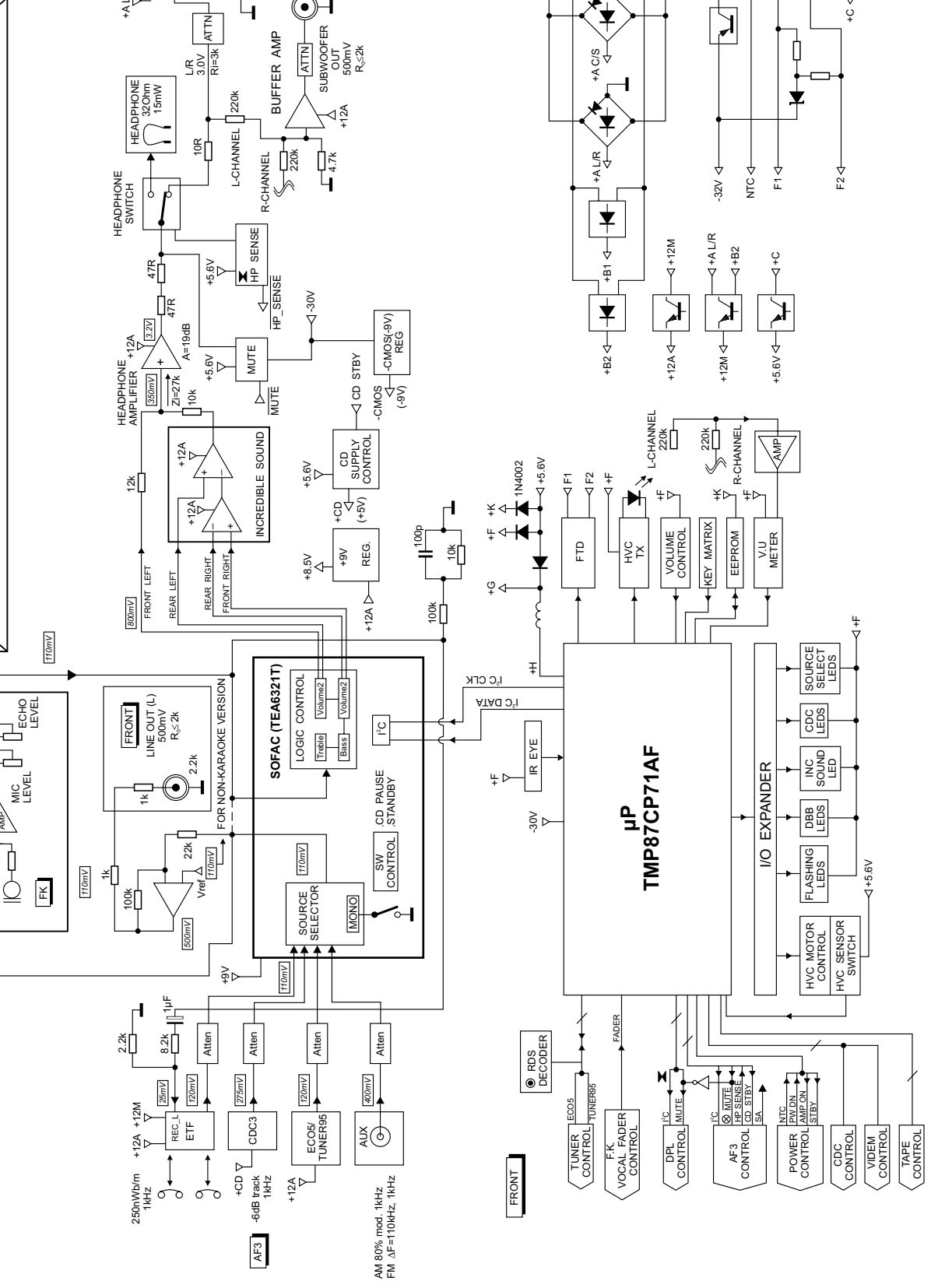


# SET BLOCK DIAGRAM



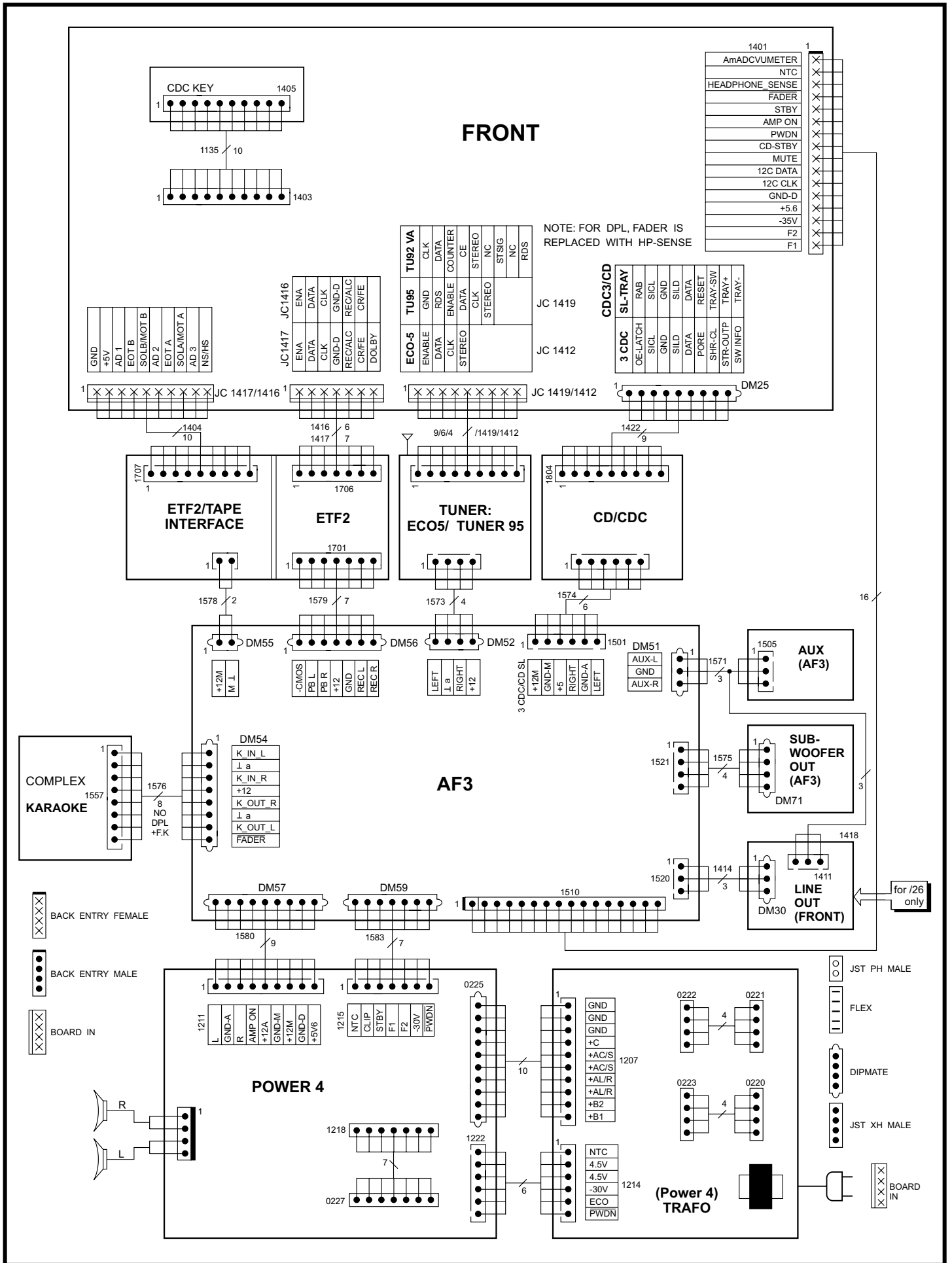
## POWER AMPLIFIER

**LEGEND:**  
 NK: FOR NON-KARAOKE  
 ▲: PROVISIONS FOR UL VERSION  
 NK: FOR FULL KARAOKE  
 ○: FOR TUNER 95 & NEW /34 ECO5 TUNER WITH RDS  
 ⊗: TO MUTE CENTRE AND SURROUND WHEN PLUG IN THE HEADPHONE  
 ⊗: TO MUTE L/R CHANNELS

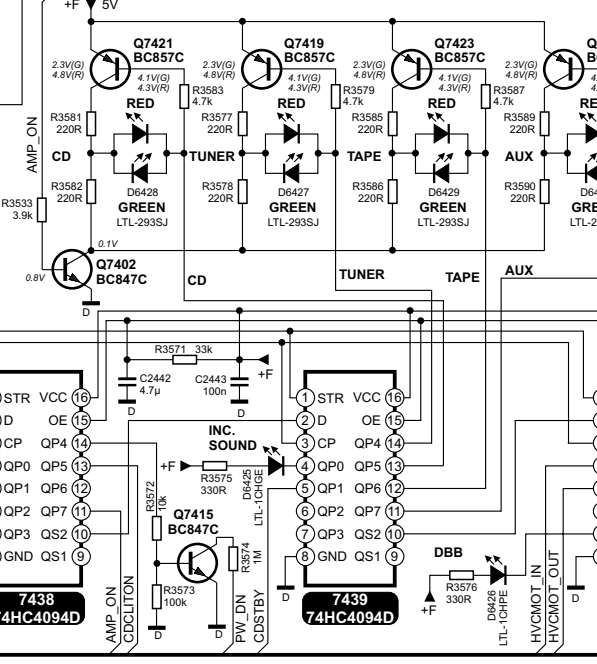
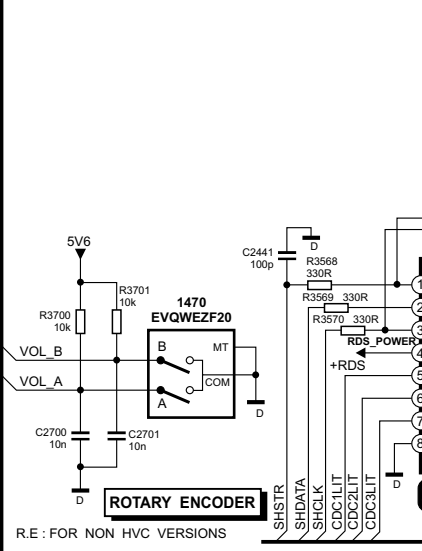
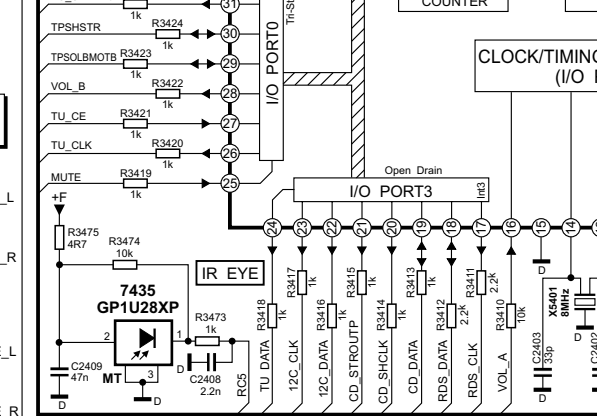
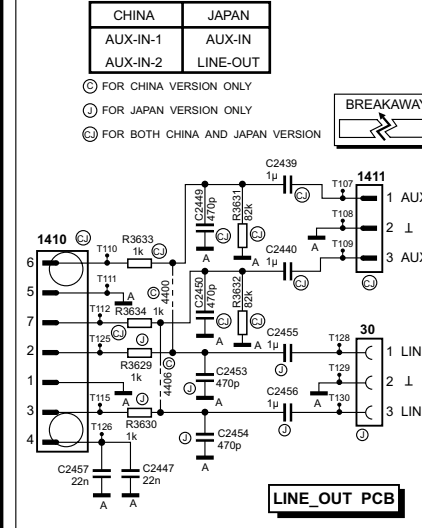
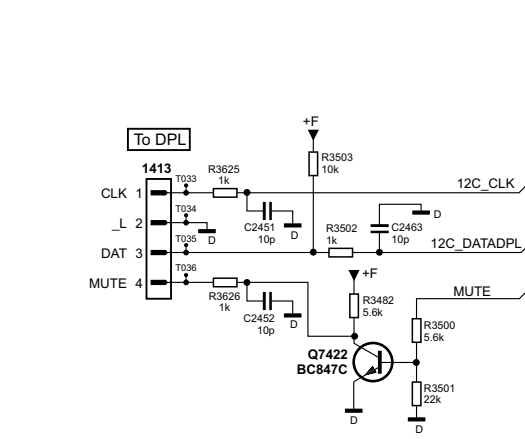
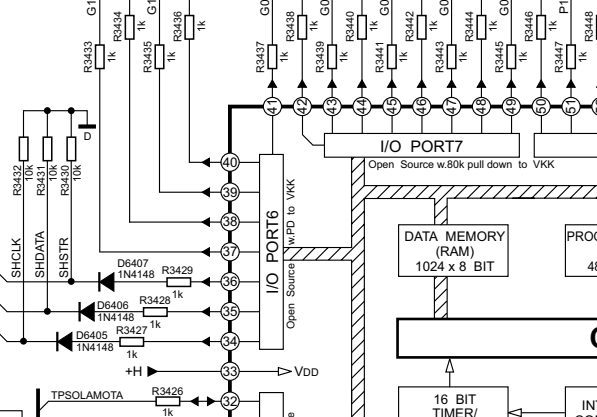
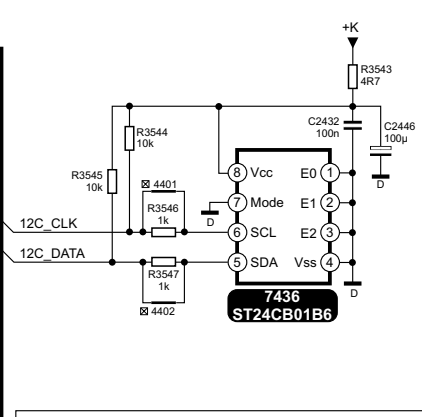
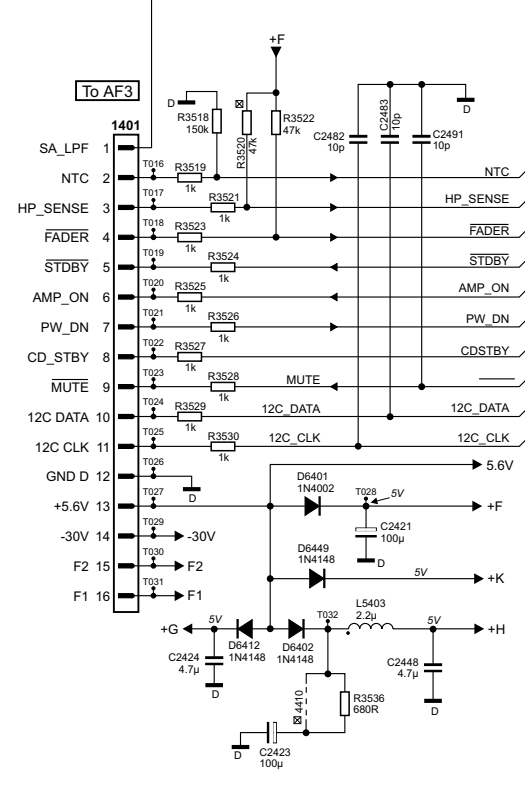
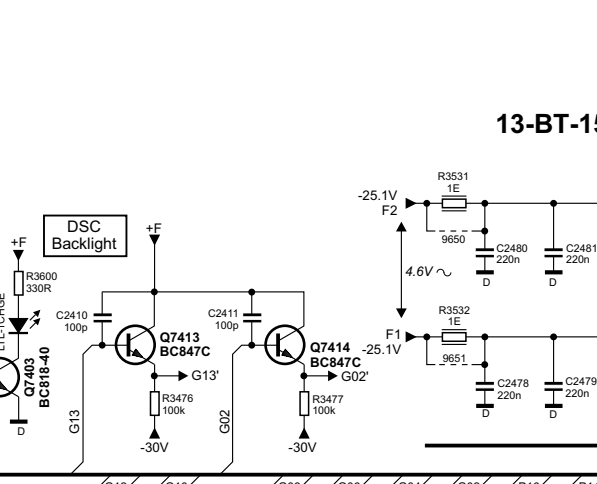
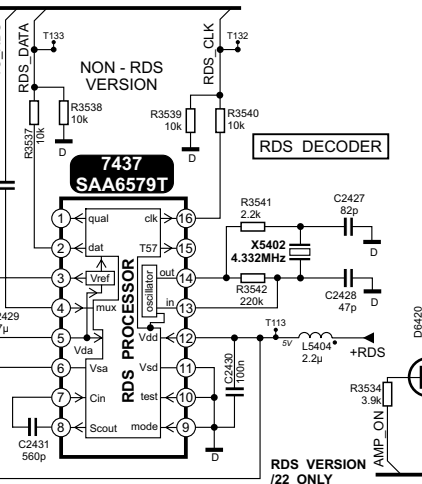
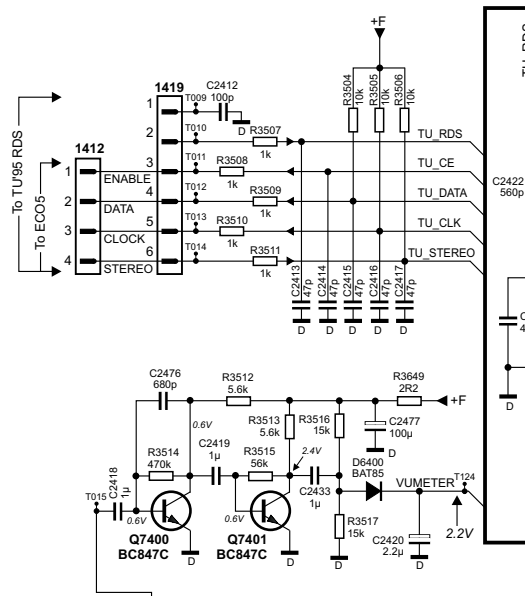


# FRONT CIRCUIT (Non-HVC version)

# SET WIRING DIAGRAM

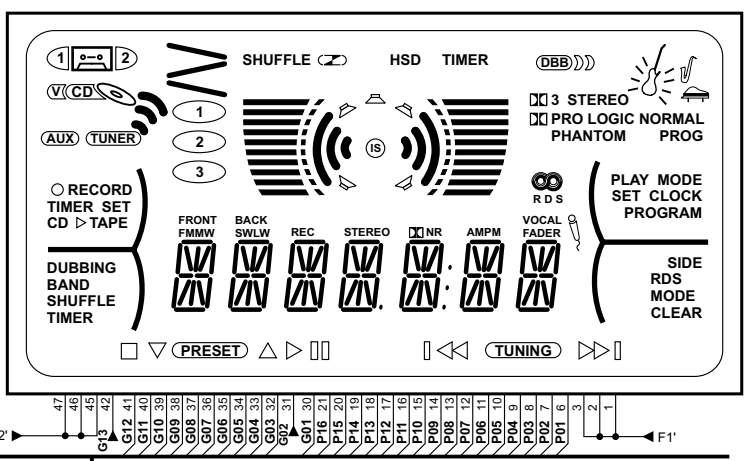




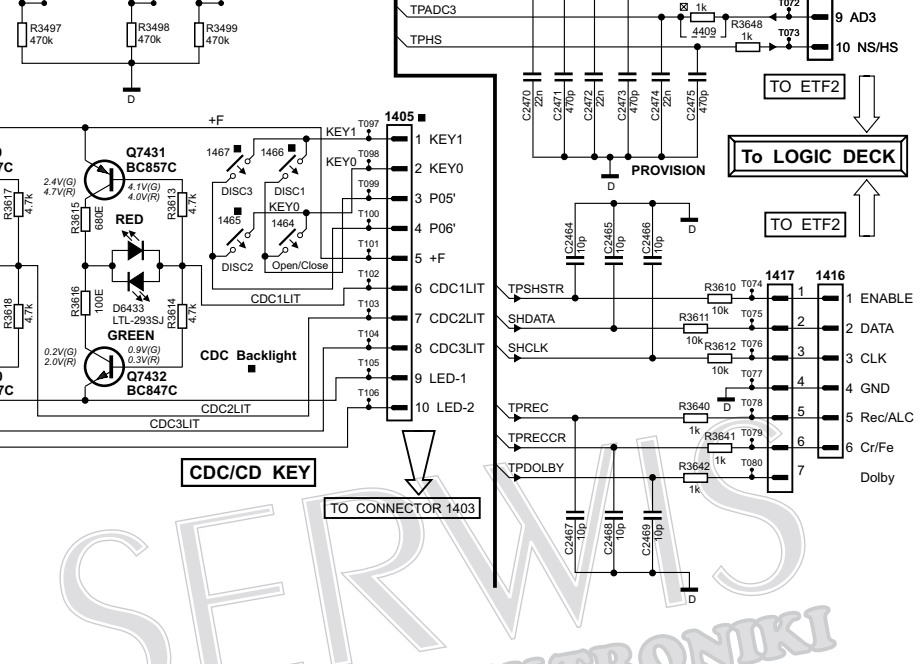
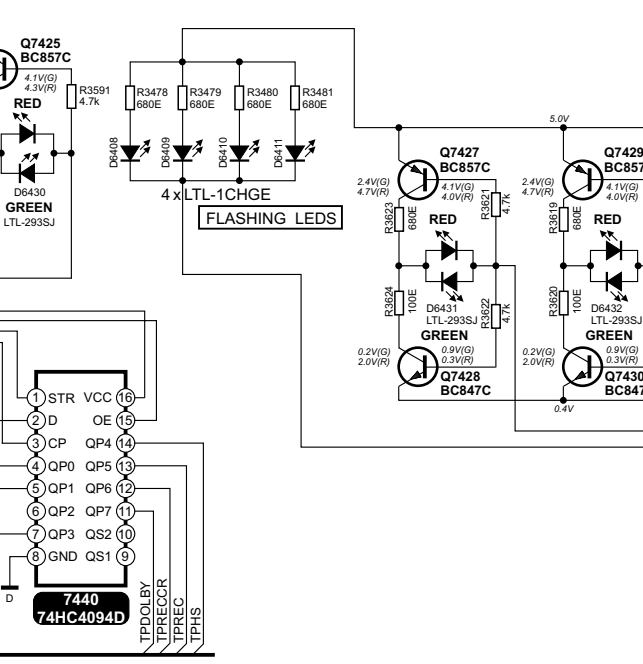
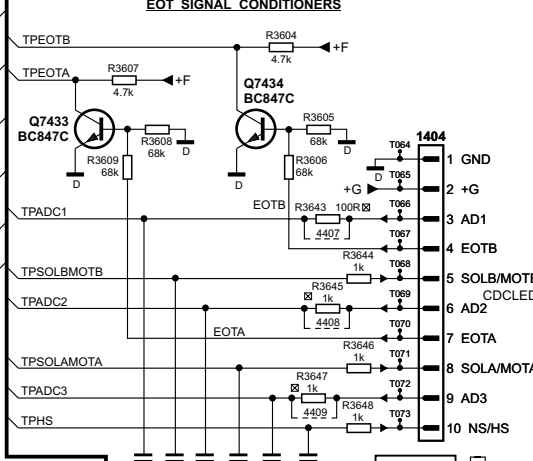
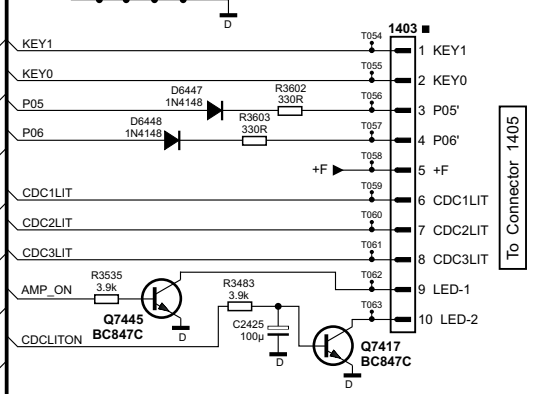
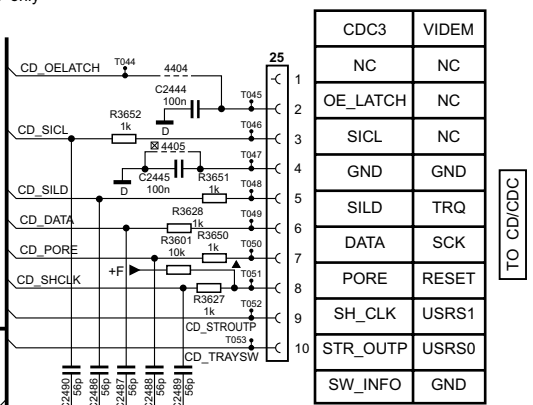
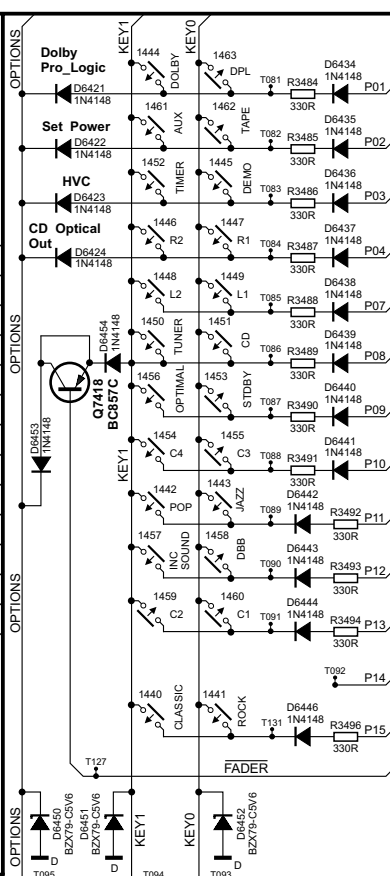
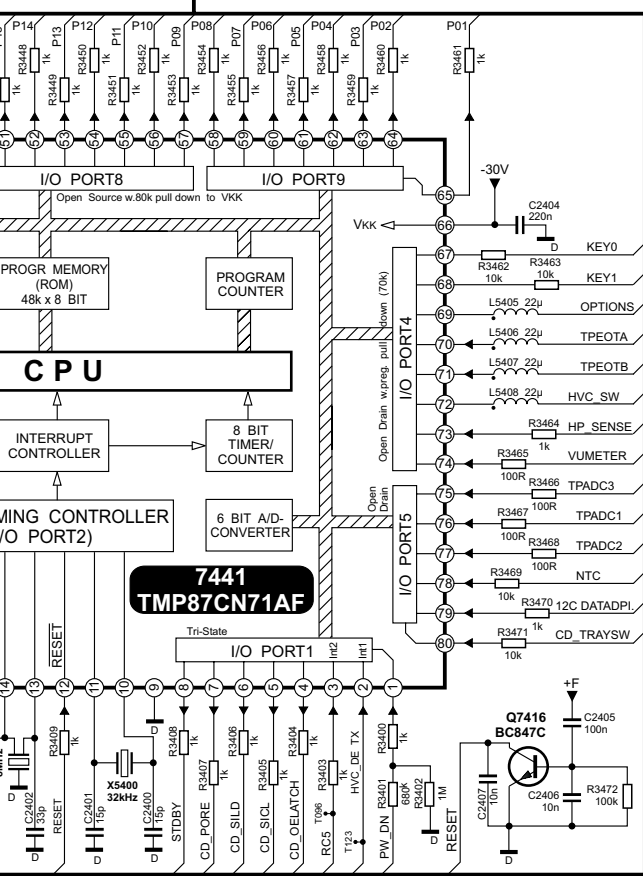




1400  
-150GK



- # For version not using TUNER 92
- @ For version with TUNER 92
- For CDC3 version
- ▲ For CDSL version
- ⊗ For provision only



SERWIS  
ELEKTRONIKI