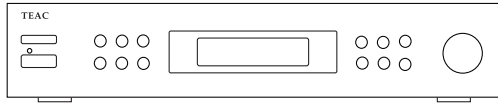


# TEAC



## SERVICE MANUAL

# T-R610 DAB

DAB/FM Tuner



### NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.  
[E]: Europe [UK]: U.K

### CONTENTS

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# T-R610DAB

## 1 SPECIFICATIONS

### DAB Section

Tuning Range	
Band III : 5A to 13F (174.928 MHz to 239.200 MHz)	
L-Band: LA to LW (1452.960 MHz to 1490.624 MHz)	
Usable Sensitivity:	-80 dBm
Frequency Response:	20 Hz - 20 kHz (+0.1 dB/-0.3 dB)
Distortion:	0.08 %
Signal-to-Noise Ratio:	100 dB
Digital Output Sampling Rate:	48 kHz

### FM Section

Tuning Range:	87.5 MHz to 108.0 MHz (50 kHz steps)
Usable Sensitivity:	26 dBu
Frequency Response:	20 Hz - 15 kHz (+0.5 dB/-3 dB)
Capture Ratio:	2 db (at 98 MHz)
Distortion:	Mono: 0.2% Stereo: 0.3%
Signal-to-Noise Ratio:	Mono: 50 dB Stereo: 45 dB
Aerial Input Impedance:	50 ohm (F-type)

### GENERAL

Power Requirements:	AC230V, 50 Hz
Power Consumption:	8 W
Dimension (W x H x D):	435 x 96 x 308.5 mm
Weight: (net)	2.95 kg

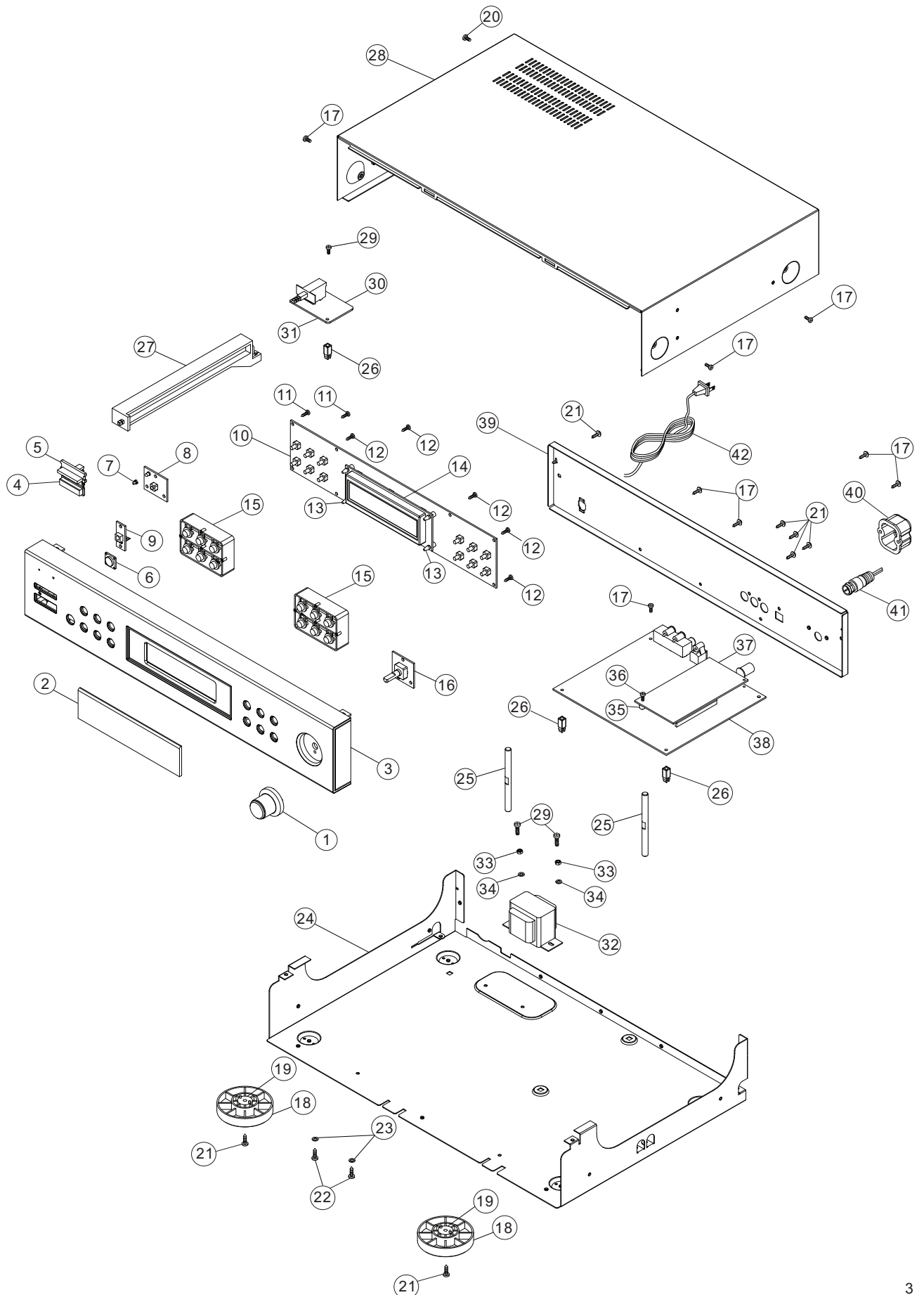
### Standard Accessories:

Remote Control Unit x 1  
DAB/FM type Antenna x 1  
Batteries (AA) x 2  
RCA cable x 1  
Owner's Manual x 1  
Warranty Card x 1

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.
- Weight and dimensions are approximate.


## 3. EXPLODED VIEWS AND PARTLIST

### EXPLODED VIEW-1



# T-R610DAB

## EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-1	6047-002402E000	VOLUME KNOB	
1-2	6047-002407E000-01	LCD LENS	
1-3	6047-002401E000-01	FRONT PANEL	
1-4	6047-002404E000	STANDBY KNOB	
1-5	6047-002405E000	POWER KNOB	
1-6	6047-002410E000	IR LENS	
1-7	6047-002408E000	LED LENS	
1-8	9447-024000E111	STANDBY PCB ASSY	
1-9	9461-024000E081	IR REMOTE PCB ASSY	
1-10	9447-024000E041	CONTROL PCB ASSY	
1-11	7003-006002E112	SCREW M3x6 P.T.P. B/H	
1-12	7003-008002E112	SCREW M3x8 P.T.P. B/H	
1-13	6600-220113E000	PLASTIC STANDOFF PIONEER-TECH	
1-14	4006-160021E800	LCD PCBA #CBC016002AY00-FFW-R	
1-15	6047-002403E000	BUTTON	
1-16	9447-024000E121	ENCODER PCB ASSY	
1-17	7003-006001E111	SCREW M3x6 S.T.P. B/H (BLK)	
1-18	6011-000118E000	CD-P1100 LEG	
1-19	6600-070010E001	CD-P1100 RUBBER PAD	
1-20	7003-006001E221	SCREW M3x6 STP. B/H (BLK)	
1-21	7003-008002E111	SCREW M3x8 P.T.P. B/H (BLK)	
1-22	7003-010010E111	SCREW M3x10 M.C. B/H (BLK)	
1-23	7103-206005E022	METAL WASHER 3.2x6x0.5	
1-24	6547-002401E000	BOTTOM CABINET	
1-25	6042-030109E000	SUPPORTING COLUMN	
1-26	6090-050113E000	PCB MOUNT (STAND OFF)	
1-27	6011-000103E002	POWER BAR	
1-28	6547-002404E000-01	TOP CABINET	
1-29	7002-616002E112	SCREW M2.6x16 P.T.P. B/H	
1-30	9447-024000E071	POWER PCB ASSY	
1-31	4081-110001E001	INSULATION SHEET	
1-32	 3200-080641E000	TRANSFORMER EI-41 230V	
1-33	6600-120030E001	NUT M3 HEX	
1-34	7103-010005E022	METAL WASHER 3.3x10x0.5	
1-35	6047-002411E000	PLASTIC STUD	
1-36	7002-012002E112	SCREW M2x12 PTP. B/H ZN	
1-37	4006-112000E007	DAB PCBA UNIT #GYRO-1120	
1-38	9447-024000E011	MAIN PCB ASSY	
1-39	6547-002402E000-01	REAR PANEL	
1-40	6047-002412E000	ANTENNA COVER	
1-41	2616-230003E800	SPEC RF ANTENNA WIRE - WHT	
1-42	2610-218309E029	AC POWER COED 1830MM - VDE [E]	
	2610-218309E005	AC POWER COED 1830MM - BSI [UK]	

# T-R610DAB

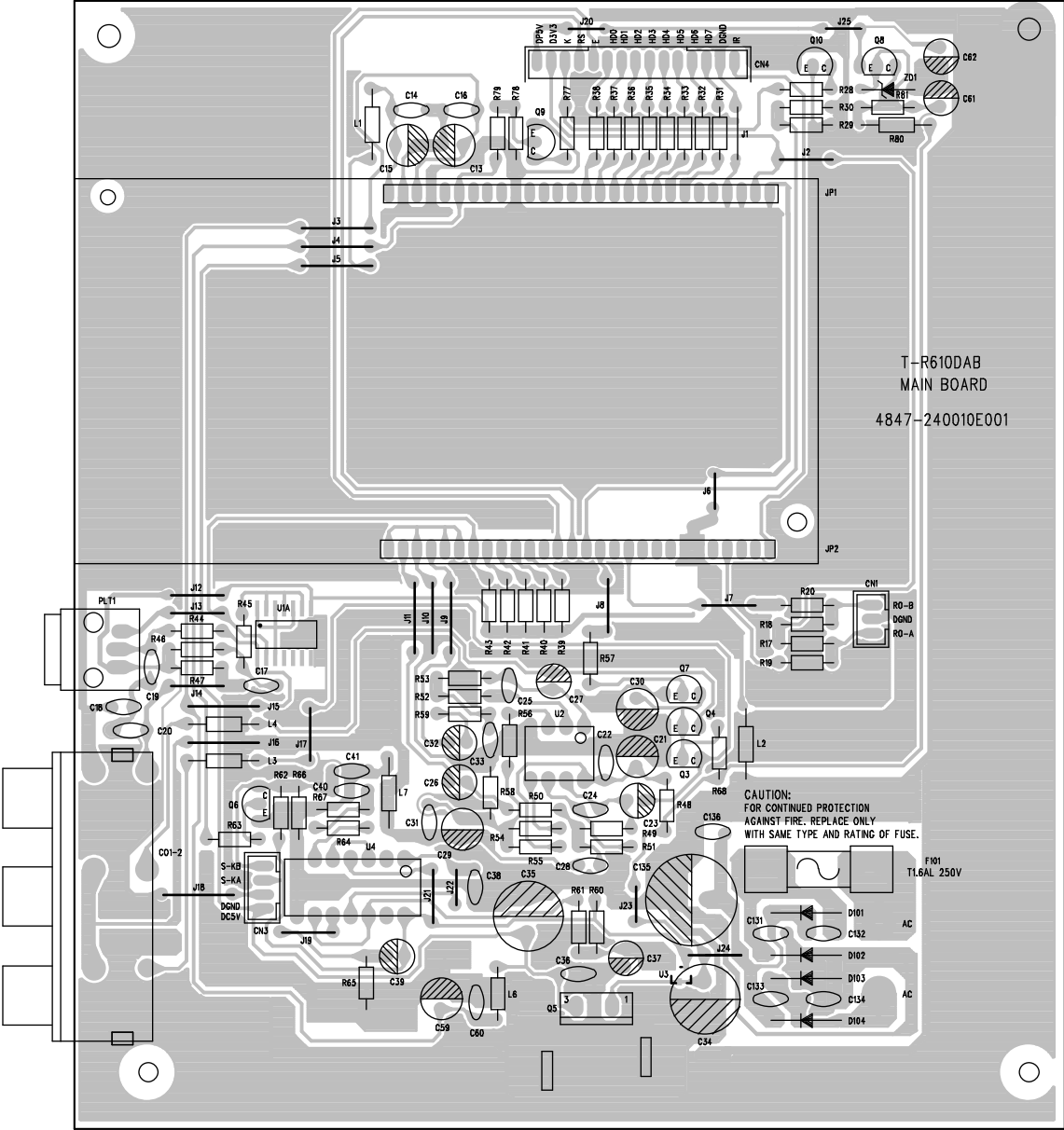
## 3 PC BOARDS AND PARTS LIST

### MAIN PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9447-024000E011	MAIN PCB ASSY	
	4847-240010E001	MAIN PCB	
C01-02	2330-007909E000	RCA JACK 3P #AV3-8.4-14/EC	
C35	⚠ 1102102014E000	E.CAP 1000UF/16V	
C135	⚠ 1102-222024E000	E.CAP 2200UF/25V	
CN1	2300-003000E001	STRAIGHT CONN WAFER 3PIN 2MM	
CN4	2300-015000E000	STRAIGHT CONN WAFER 15PIN 2MM	
D101-104	1401-140040E000	RECTIFIER DIODE 1N4001	
F101	⚠ 4030-160250E000	FUSE T1.6A L250V	
JP1,JP2	2350-028001E000	28 PIN STRAIGHT SOCKET 2MM	
L1,2,3,4,7	1503-000000E100	BEAD COIL FB-35608	
L6	1504-100300E100	AXIAL INDUCTOR 10UH	
PLT1	4300-179000E000	APT X179AT FIBER OPTIC TRANSMITTING MODULE	
Q3,4,7,9,10	1300-901400E100	TR - 9014C	
Q5	4178-050334E700	IC - L7805CV	
Q8	1300-805000E100	TR - 8050D	
U1A	4174-040103E000	IC - TC74HCU04AFN	
U2	4145-580051E601	IC - NJM4558D	
ZD1	1402-560000E000	ZENER DIODE 5.6V	

# T-R610DAB

## MAIN PCB



# T-R610DAB

## CONTROL PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9447-024000E041	CONTROL PCB ASSY	
	4847-240040E001	CONTROL PCB	
CN2	2370-016300E002	STRAIGHT SINGLE HEADER 16PIN 2.5MM	
CN5	2300-005000E000	STRAIGHT CONN. WAFER 5PIN 2MM	
CN6	2300-003000E000	STRAIGHT CONN. WAFER 3PIN 2MM	
LCD1	4006-160021E800	LCD PCBA #CBC016002AY00-FFW-R	
SW1-SW12	2400-020200E001	TACT SW 2P2T #KPT-1105B	

## IR REMOTE PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9461-024000E081	IR REMOTE PCB ASSY	
	4861-240080E101	IR REMOTE PCB	
IR1	3001-203801E000	INFRARED SENSOR IRM-2638B	

## ENCODER PCB ASSY

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9447-024000E121	ENCODER PCB ASSY	
	4847-24012E001	ENCODER PCB	
EN1	2409-020200E007	ROTARY ENCODER EC-12E24204A9	

## STANDBY PCB ASSY

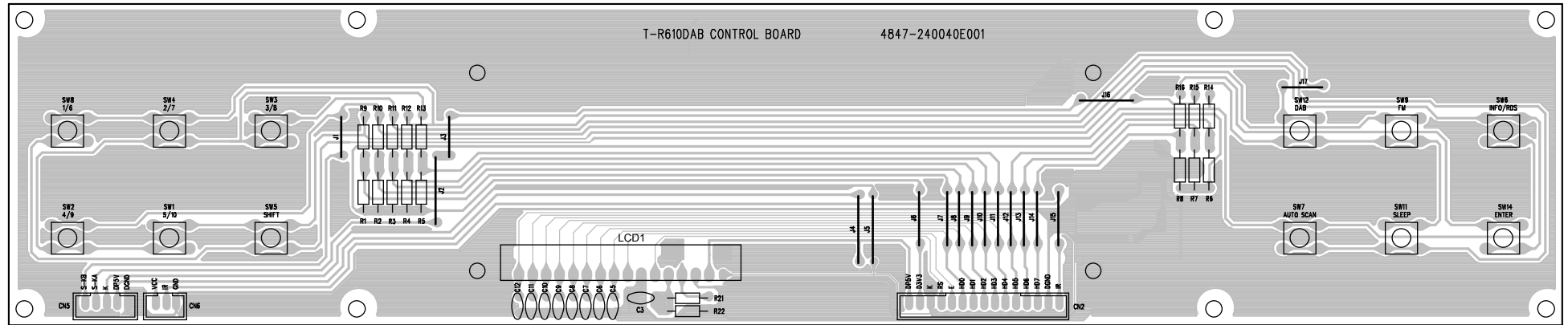
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9447-024000E111	STANDBY PCB ASSY	
	4847-240110E001	STANDBY PCB	
D1	3100-224000E000	LED ORANGE 3MM	
Q1	1300-901400E100	TR - 9014C	
Q2	1301-901500E100	TR - 9015C	
SW13	2400-020200E000	TACT SW 2P2T #KPT-1105A	

## POWER PCB ASSY

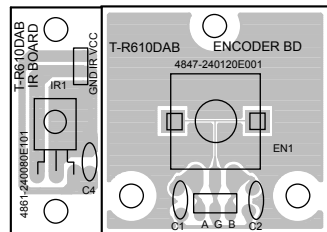
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9447-024000E071	POWER PCB ASSY	
	4847-240070E001	POWER PCB	
S101	2401-010100E009	POWER SWITCH 1P1T #PS3-22SPA-W4CZ	

# T-R610DAB

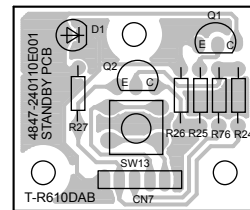
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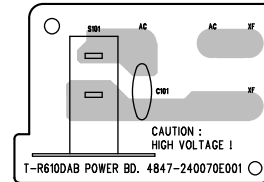
## IR PCB ENCODER PCB



## STANDBY PCB



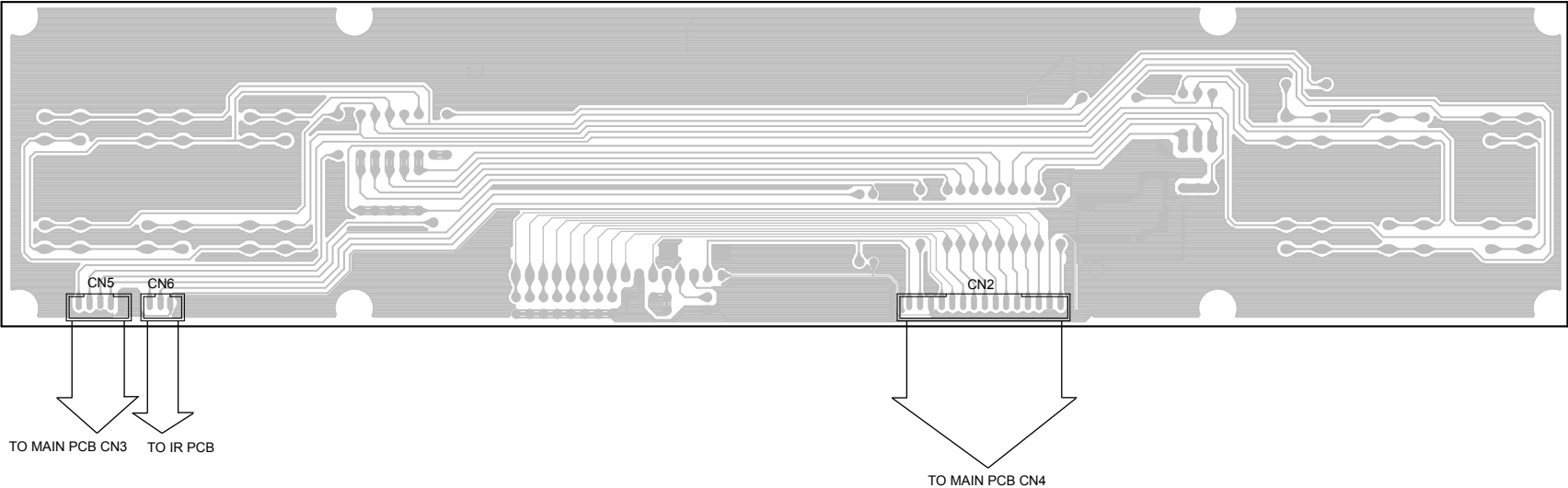
## POWER PCB



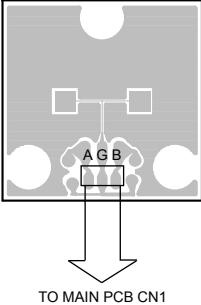


4 WIRING DIAGRAM

CONTROL PCB



ENCODER PCB



# T-R610DAB

## 5 INCLUDED ACCESSORIES

### INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	5100-610240E000	INSTRUCTION BOOK - E/F/G/I	
	4090-150000E000	BATTERY AA SUM3 1.5V	
	2611-310009E000	1000MM AUDIO CABLE PVC-2P	
	9805-470000E001	REMOTE CONTROL	

# T-R610DAB

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# TEAC

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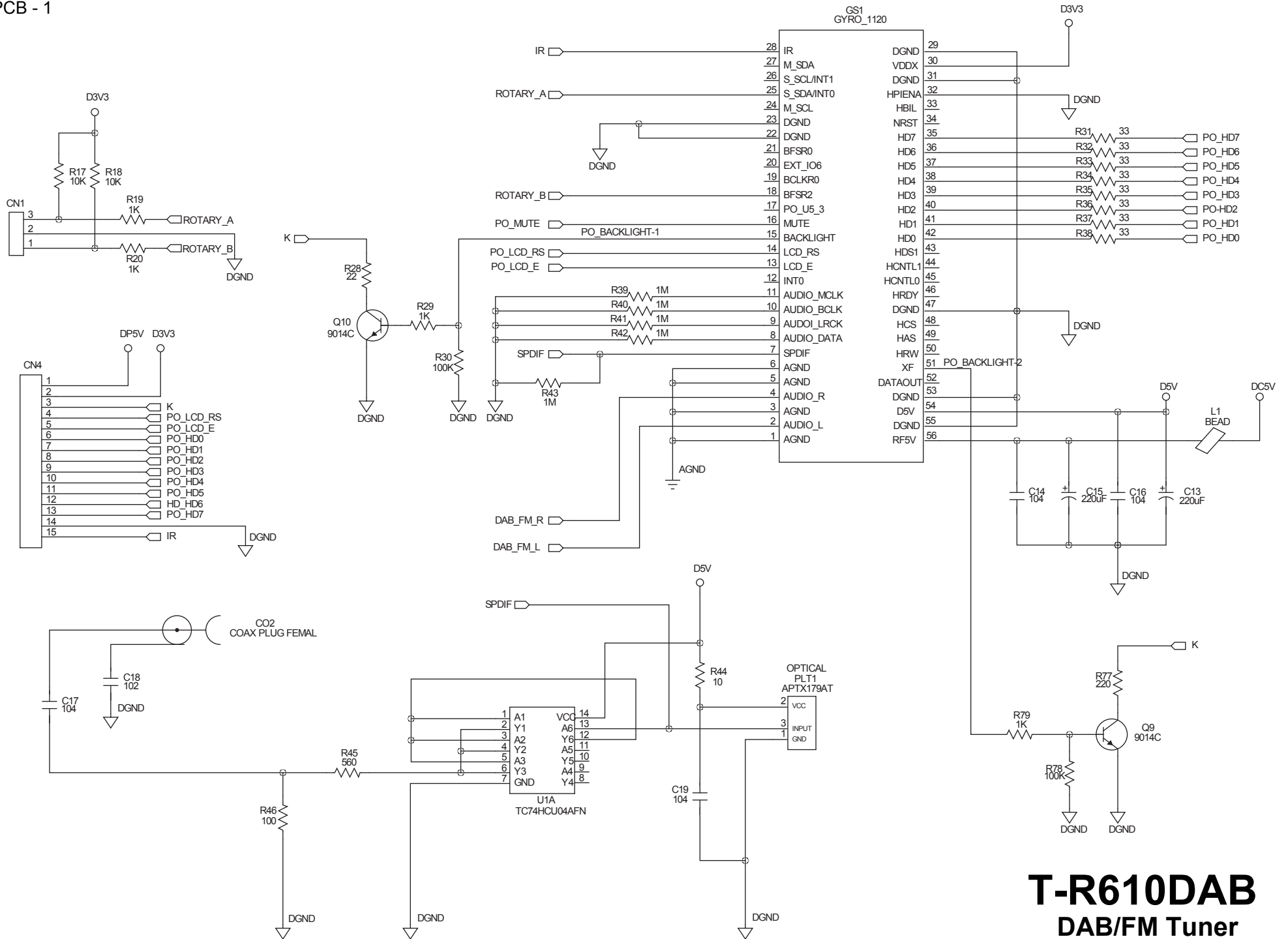
<b>TEAC CORPORATION</b>	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: (905)-890-8008
TEAC MEXICO, S.A.De C.V.	Campesinos N°184, Colonia.Granjas Esmeralda, Delegacion Iztapalapa, CP 09810, Mexico DF Phone: (525)-581-5500
TEAC UK LIMITED	Unit 19 & 20, The Courtyards, Hatters Lane, Watford, Hertfordshire, WD18 8TE5, U.K. Phone:(0845) 130-2511
TEAC EUROPE GmbH	Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany Phone: 0611-71580
TEAC ITALIANA S.p.A.	Via C, Cantu 9/A, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD.	280 William Street, Melbourne VIC 3000, Australia Phone:(03)9672-2400
A.B.N. 80 005 408 462	

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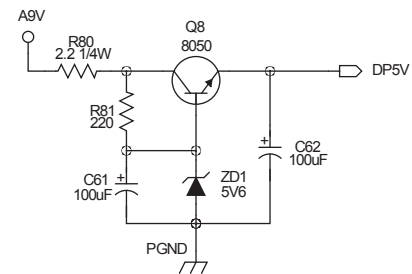
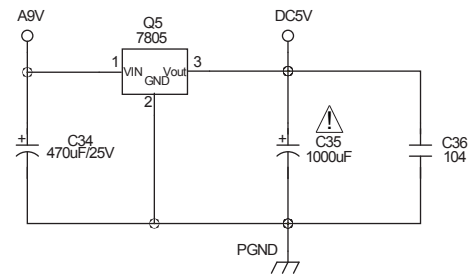
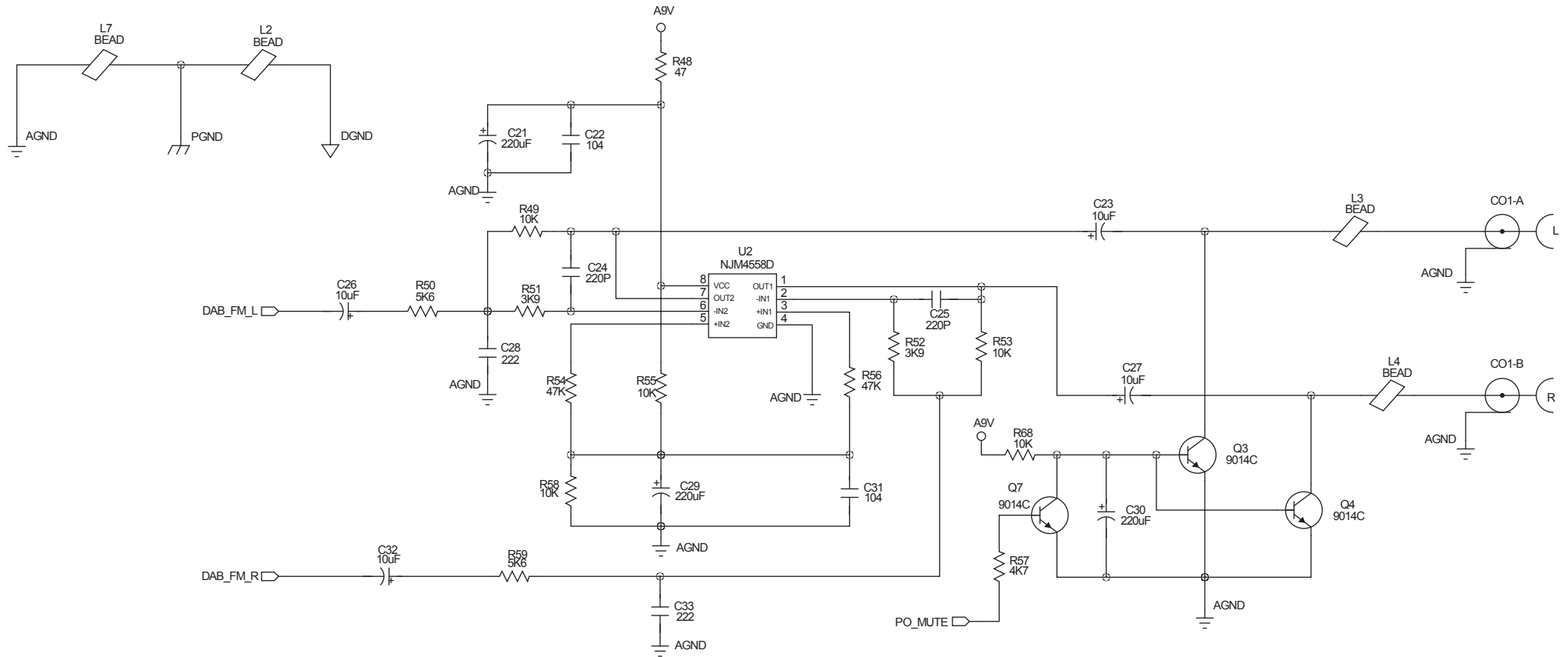
PREPARED IN HONG KONG

MAIN PCB - 1



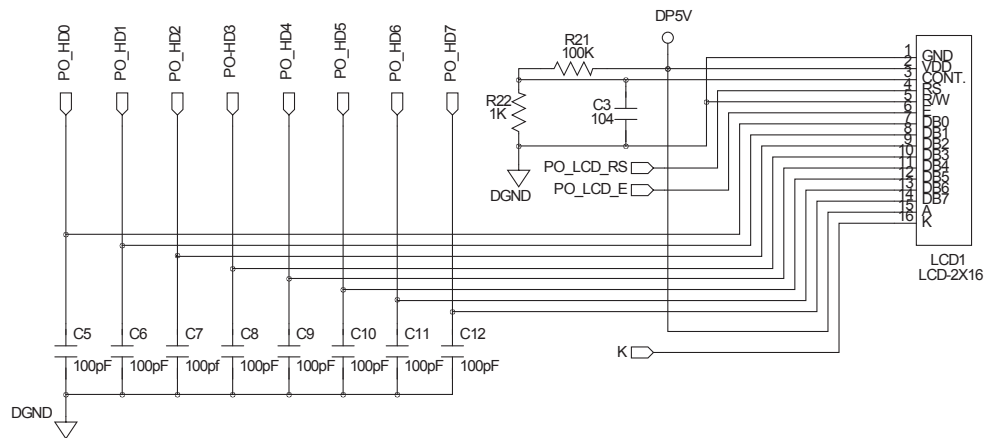
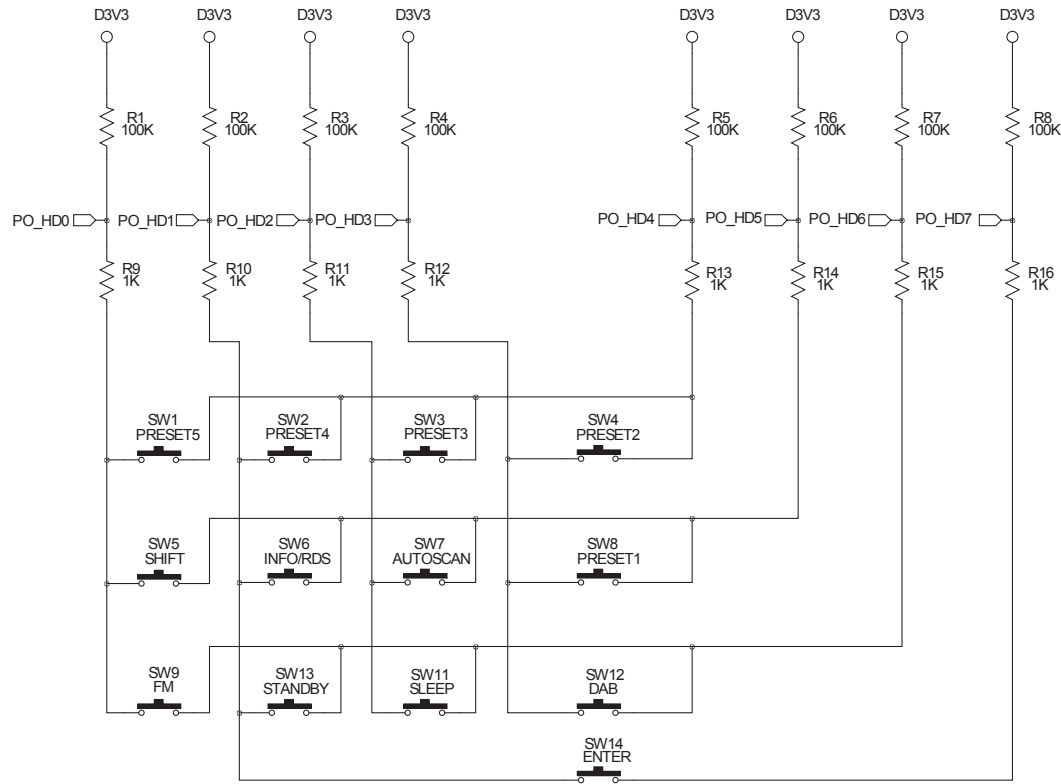
**T-R610DAB**  
DAB/FM Tuner

MAIN PCB - 2

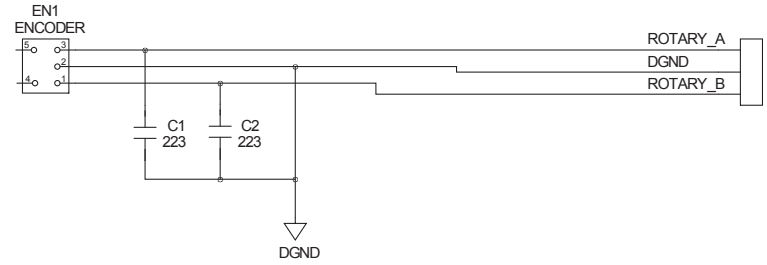


**T-R610DAB**  
**DAB/FM Tuner**

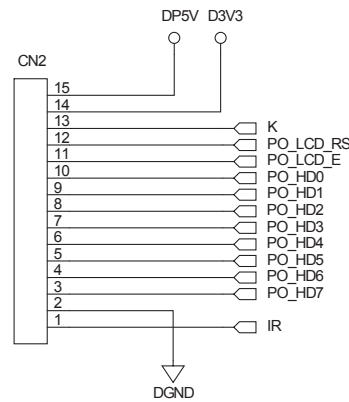
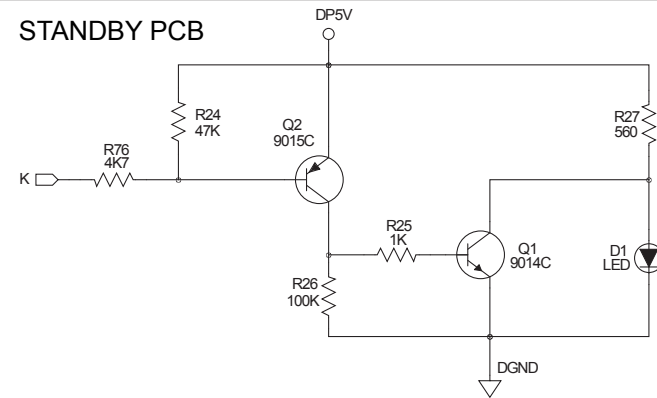
### CONTROL PCB



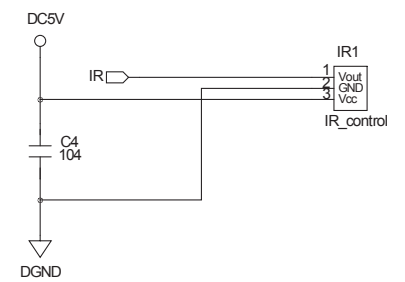
### ENCODER PCB



### STANDBY PCB

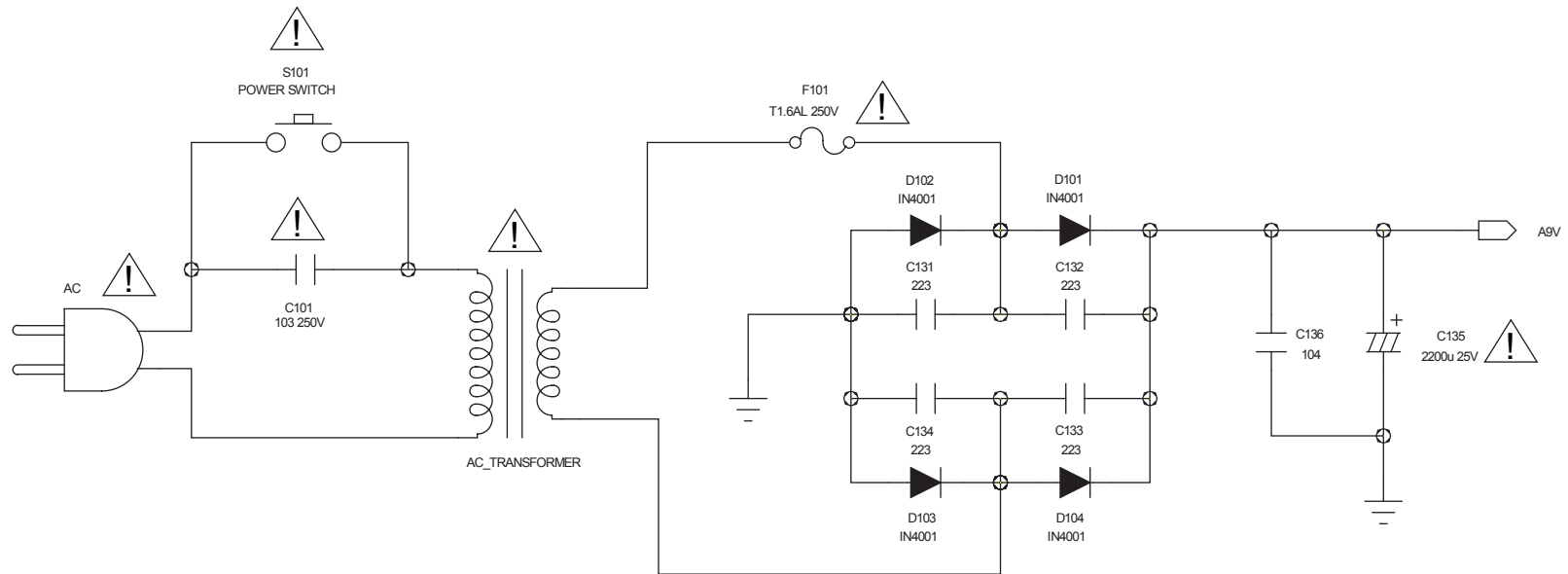
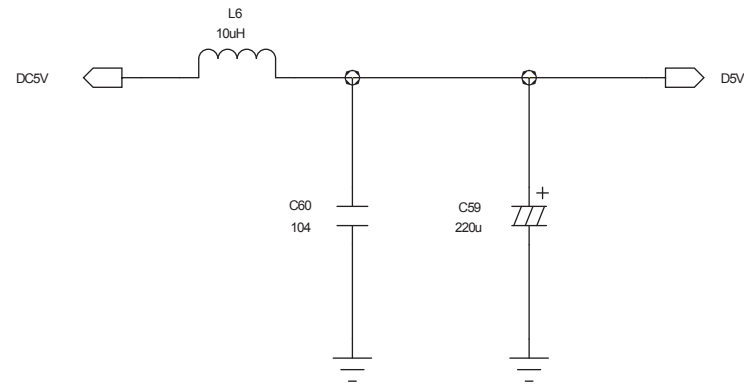


### IR REMOTE PCB



# T-R610DAB DAB/FM Tuner

# POWER PCB



**T-R610DAB**  
DAB/FM Tuner