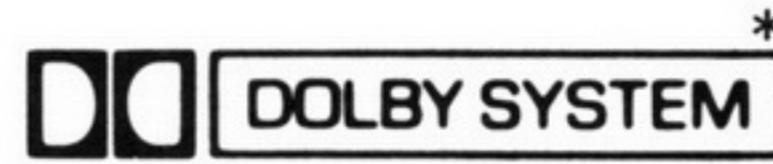


# Service Manual

Mini Cassette

## RQ-X11

Stereo Cassette Player



Colour

(K)..... Black Type  
 (A)..... Blue Type  
 (S)..... Silver Type



Area

Suffix for Model No.	Areas	Colour
[E]	Europe	(K) (A) (S)
[GC]	Asia, Latin America, Middle Near East and Africa areas.	(K)

### MECHANISM SERIES : AR20

#### ■ SPECIFICATIONS

Power Requirement: Battery; with one "AA" size (R6/LR6) battery (DC: 1.5V)  
 AC; with optional AC adaptor RP-AC11

Power Output: 5 mW + 5 mW (Max).

Input: DC IN; 1.5V (  $\diamond$ - $\ominus$ - $\diamond$  )

Output: Headphones; 20  $\Omega$  ( $\phi$ 3.5)

Dimensions: 109.9(W)  $\times$  80.5(H)  $\times$  30.9(D)mm

Weight: 163g (without batteries)

Frequency Response: 30 ~ 18,000Hz (Normal/CrO<sub>2</sub>/Metal)  
 (-6dB)

Tape Speed: 4.8cm/s

Track System: 4-track 2-channel stereo playback

Notes:

1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

※ Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
 "Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

#### ⚠ WARNING

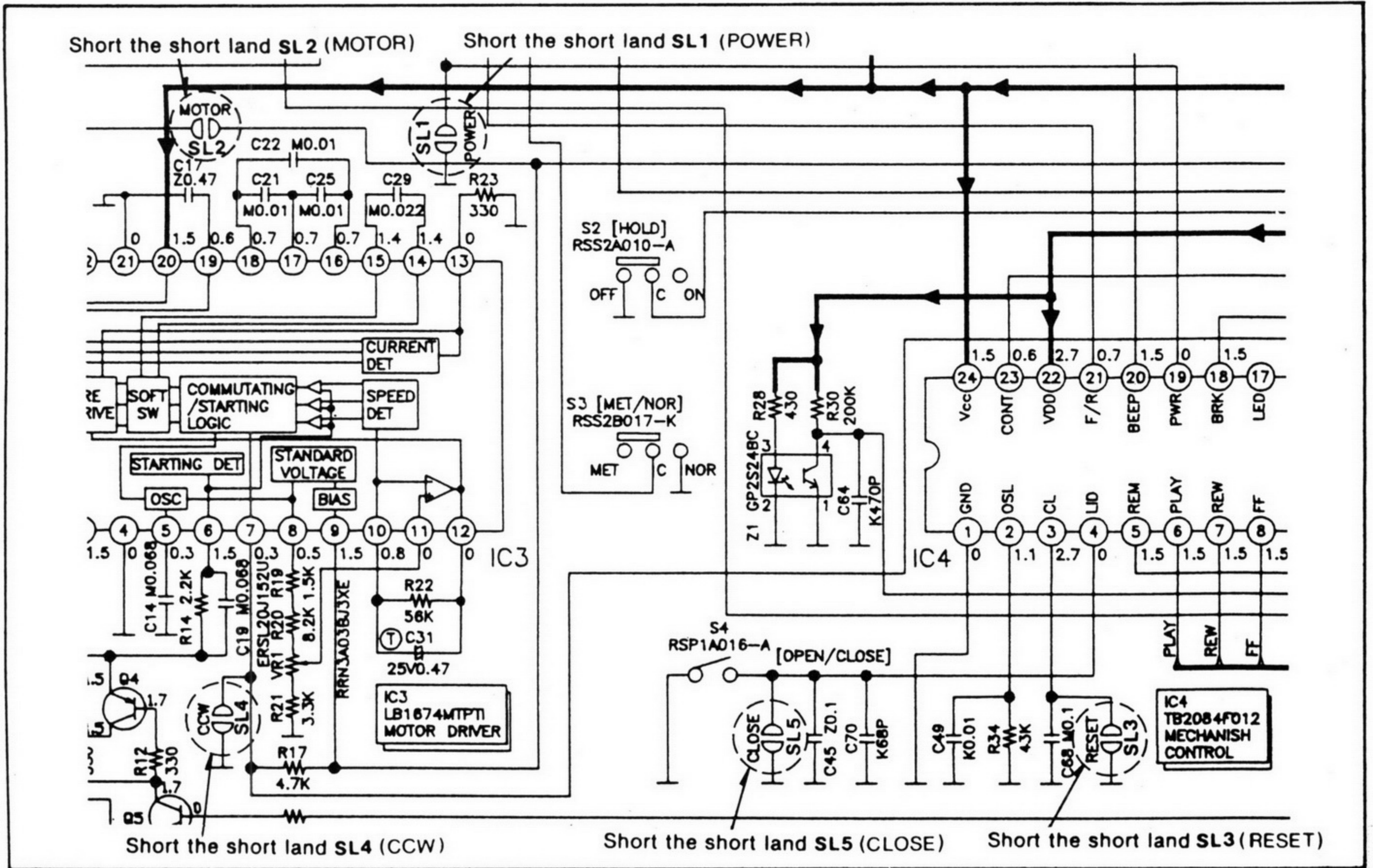
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

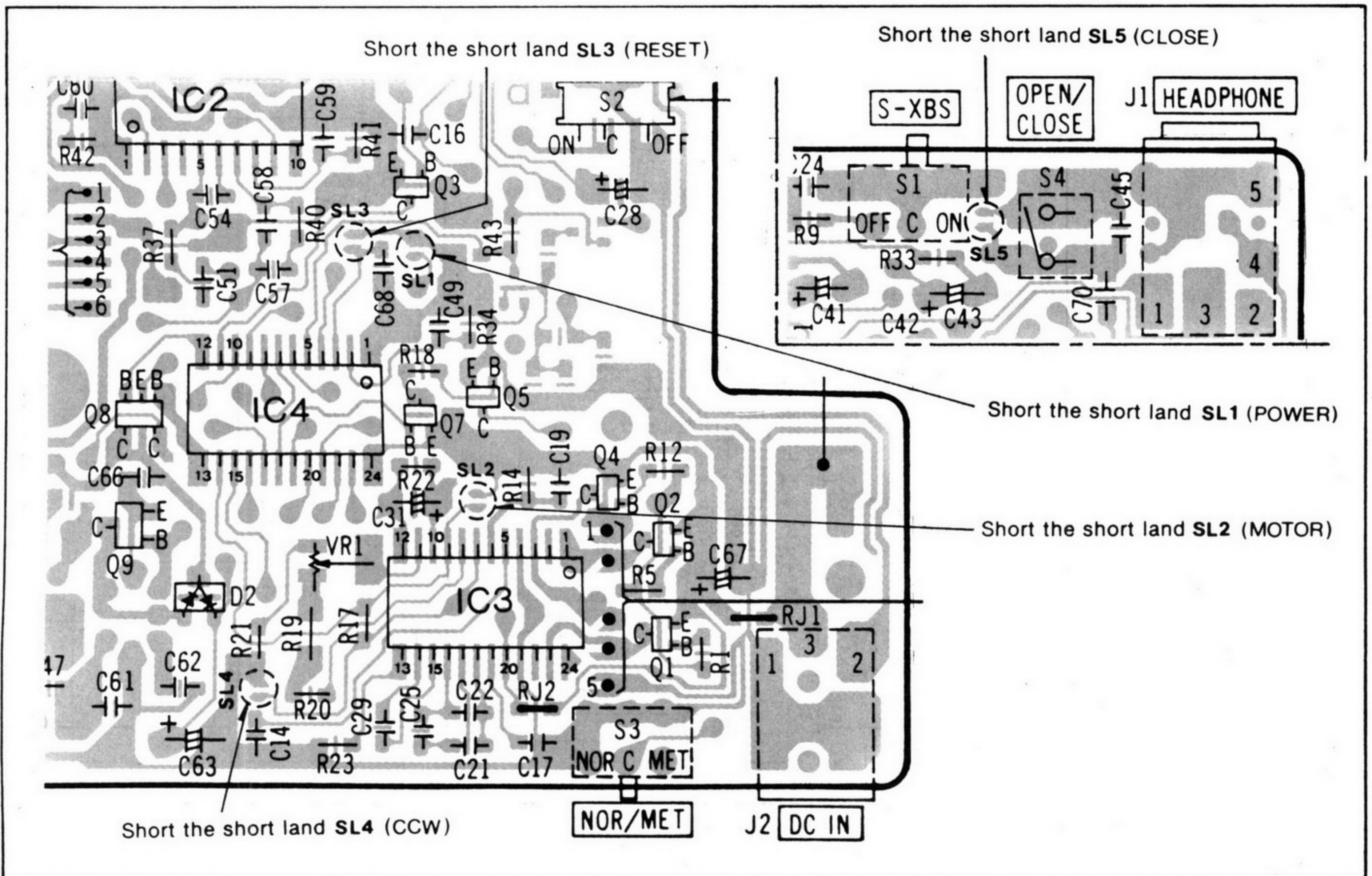
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• Short points

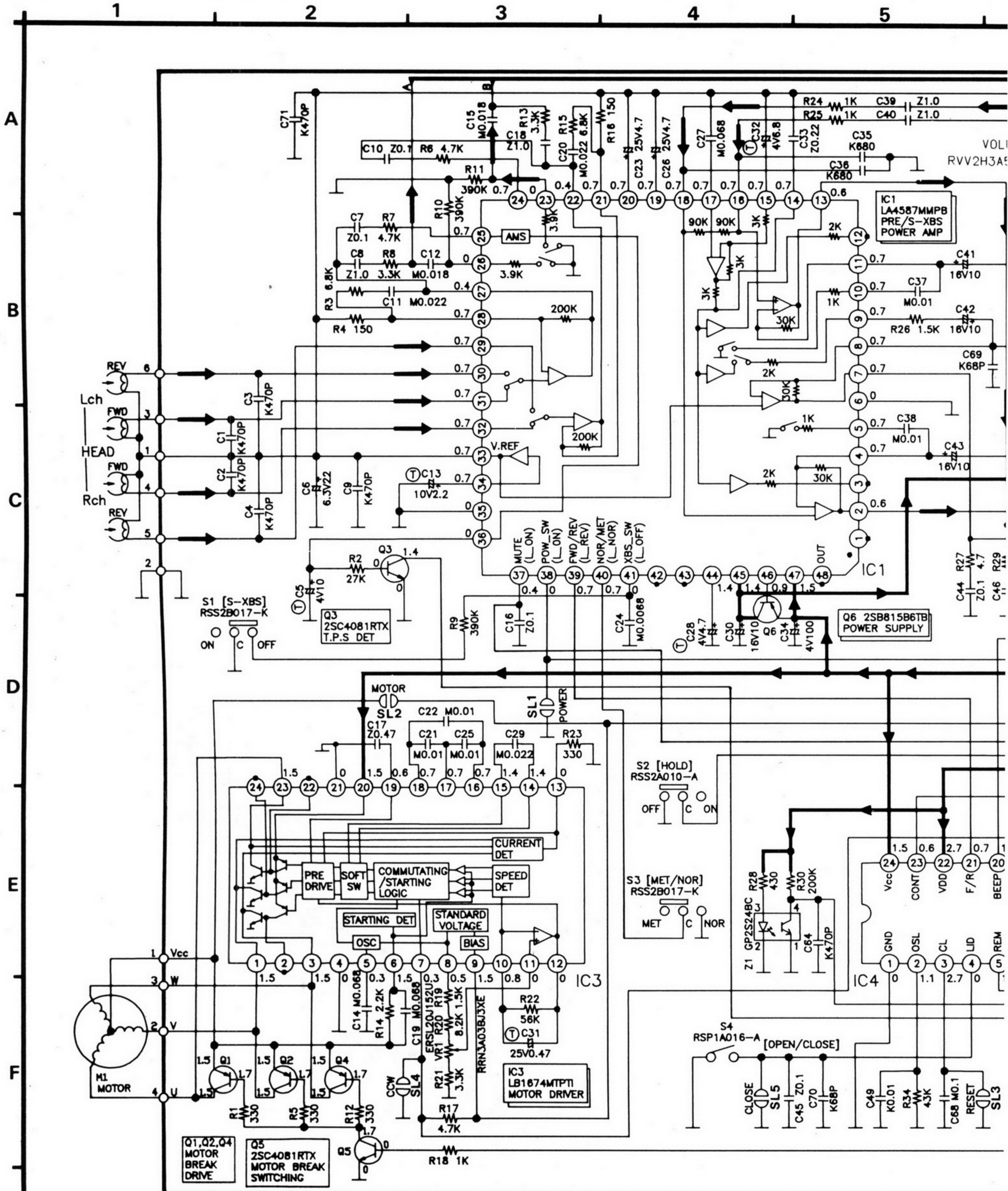
SCHEMATIC DIAGRAM

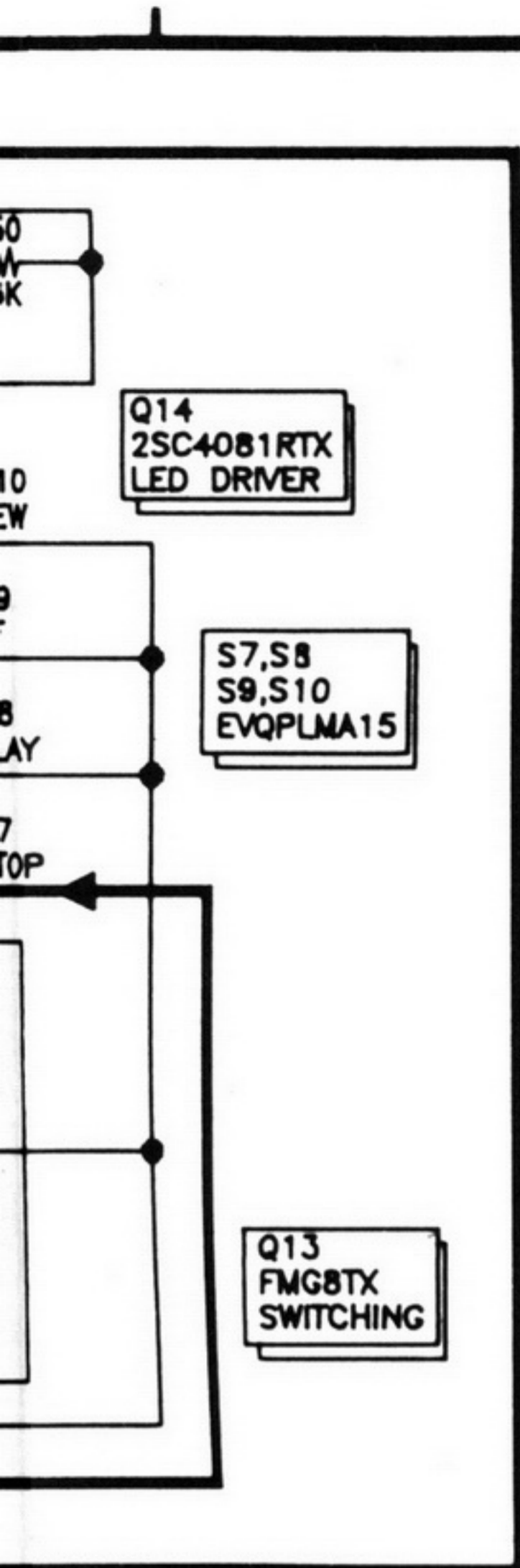


PRINTED CIRCUIT BOARD



# SCHEMATIC DIAGRAM





**Notes:**

- S1 : S-XBS switch in "OFF" position.
  - S2 : Hold switch in "OFF" position.
  - S3 : Metal/normal switch in "METAL" position.
  - S4 : Open/close switch in "OPEN" position.
  - S5 : Dolby NR switch in "ON" position.
  - S6 : Rotary switch in " REV " position.  
1...REV, 2...FF, 3...FWD, 4...REW.
  - S7 : Stop switch in "OFF" position.
  - S8 : Play switch in "OFF" position.
  - S9 : Fast foward switch in "OFF" position.
  - S10 : Rewind switch in "OFF" position.
  - VR1-1,  
VR1-2 : Volume control VR.
  - VR2 : Tape speed adjustment VR.
  - DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.  
No mark...Playback.
  - Battery current: No signal.....190 mA (VR: MIN)  
Maximum output.....210 mA (VR: MAX)
  - **This schematic diagram may be modified at any time with the development of new technology.**
- : PLAYBACK SIGNAL  
→ : ⊕ B LINE

**REPLACEMENT PARTS LIST**

Notes: □ Indicates parts that are supplied by TAMACO

Ref No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES		
IC1 □	LA4587MMPB	I. C. PRE/S-XBS/POWER AMP
IC2 □	AN7389SE1	I. C. DOLBY
IC3 □	LB1674MTPT1	I. C. MOTOR DRIVE
IC4 □	TB2004F012	I. C. MECH. CONTROL
Q1, 2, 4 □	2SA1577QT106	Transistor
Q3, 5, 14 □	2SC4081RTX	Transistor
Q6 □	2SB815B6TB	Transistor
Q7 □	RVTDTA114YUX	Transistor
Q8 □	IMB6T108	Transistor
Q9	2SD1328STXRA	Transistor
Q13 □	FMG8TX	Transistor
D1 □	SB007W03CTB	Shottcky Diode
D2 □	DCC010TX	Diode
D3	LN1261CTR	Chip L. E. D (RED)
TRANSFORMERS		
T1 □	RL09A004-T	Transformer
VARIABLE RESISTOR		
VR1 □	RRN3A03BJ3XE	V. R. Tape Speed
VR2 □	RVV2H3A54MZA	V. R. Volume
PHOTO COUPLER		
Z1 □	GP2S24BC	Photo Coupler
SWITCHES		
S1 □	RSS2B017-K	SW, S-XBS
S2	RSS2A010-1A	SW, Hold
S3 □	RSS2B017-K	SW, Tape (Met/Nor)
S4 □	RSP1A016-A	SW, (Open/Close)
S5 □	RSS2B017-K	SW, Dolby
S6 □	RSR5D001-A	SW, Rotary
S7	EVQPLMA15	SW, Stop
S8	EVQPLMA15	SW, Play
S9	EVQPLMA15	SW, FF
S10	EVQPLMA15	SW, REW
JACKS		
J1 □	RJJD5S3MZB-C	Jack, Headphones
J2 □	RJJ43K08-H	Jack, DC IN