



Technical Manual

REMOTE CONTROL CENTER RR-700/RMR-90 REMOTE CONTROL TRANSMITTER RRT-1

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Serial Nos. Beginning
NE19661

THE ROTEL CO., LTD.
ROTEL ELECTRONICS CO., LTD.
ROTEL OF AMERICA, INC.
ROTEL HI FI LIMITED.

1-36-8 OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN
2ND FLOOR, EVERGLORY BLDG., NO. 305, SECTION 3,
NANKING E. ROAD, TAIPEI, TAIWAN, REPUBLIC OF CHINA
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BUCKINGHAMSHIRE, ENGLAND

ERRATA

A. Parts List (page 3)

1. X301 Ceramic Resonator
Part No. 228641213 should read **224110008**.
2. Socket, AC Outlet,
for Europe
Part No. 648211316 should read **648211311**.
for UK
Part No. 648211311 should read **648211316**.
3. Polyethylene Bag for RR-700
Part No. 855004255 should read **855004260**.

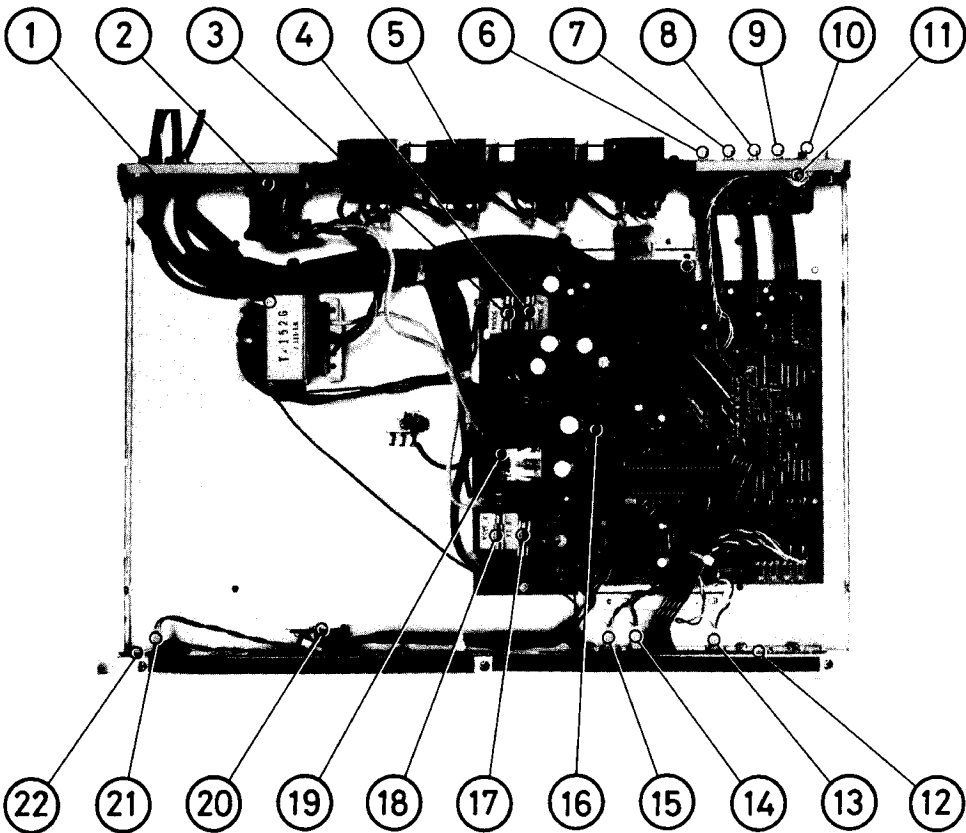
B. Schematic Diagram and P-c Board Diagrams

1. AUX should read **PHONO**.
2. R305, 10K, which is connected to p-c board pin 9
should read **R306, 10K**.
3. C001, 0.047 should read **C001, 0.022 (220/240V) or
NSK-135 (120V)** (applicable to Schematic Diagram
only).

Chassis Layout (Top View)

Installation du châssis (vue de dessus)

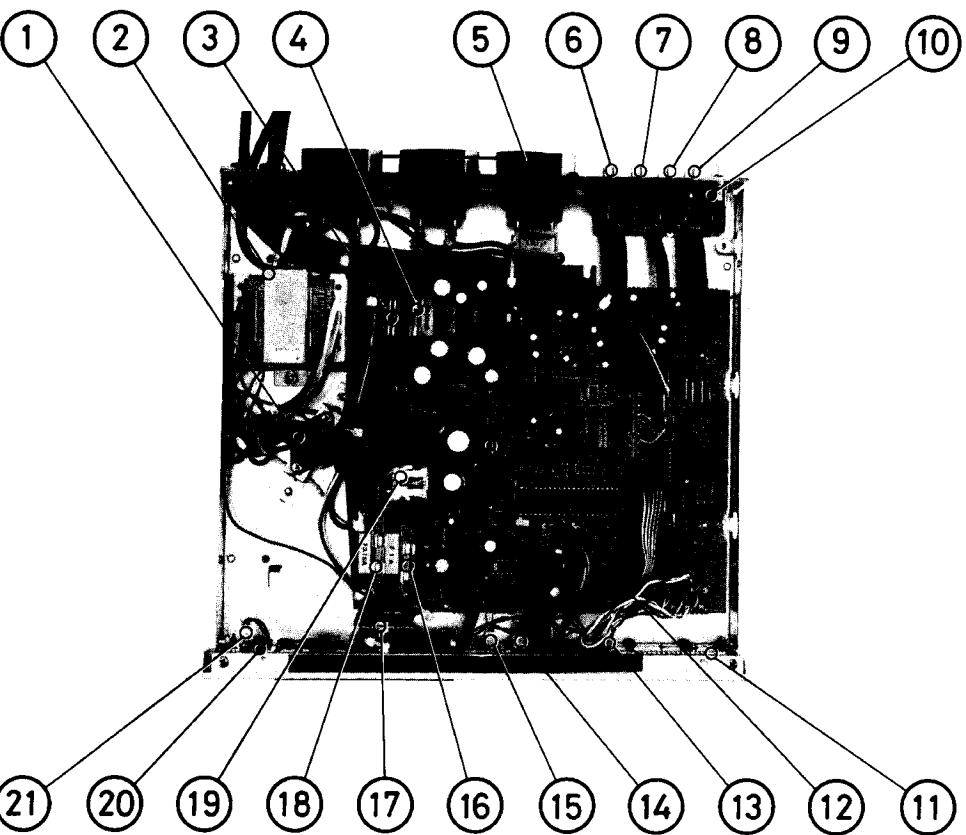
RR-700



- 1. POWER TRANSFORMER
- 2. VOLTAGE SELECTOR
- 3. F302, SECONDARY FUSE
- 4. F303, SECONDARY FUSE
- 5. AC OUTLETS
- 6. OUTPUT JACK
- 7. TAPE OUT JACK
- 8. TAPE IN JACK
- 9. TUNER JACK
- 10. INPUT JACK
- 11. TUNER/RECEIVER SWITCH
- 12. FUNCTION SWITCH PCB
- 13. MUTING INDICATOR
- 14. TUNER INDICATOR
- 15. TAPE INDICATOR
- 16. RY302, TURNTABLE RELAY
- 17. F304, SECONDARY FUSE
- 18. F301, PRIMARY FUSE
- 19. RY301, POWER RELAY
- 20. TARGET EYE PCB
- 21. POWER INDICATOR
- 22. POWER SWITCH PCB

Photo: European specification

RMR-90



- 1. VOLTAGE SELECTOR
- 2. POWER TRANSFORMER
- 3. F302, SECONDARY FUSE
- 4. F303, SECONDARY FUSE
- 5. AC OUTLETS
- 6. OUTPUT JACK
- 7. TAPE OUT JACK
- 8. TAPE IN JACK
- 9. TUNER JACK
- 10. INPUT JACK
- 11. FUNCTION SWITCH PCB
- 12. RY302, TURNTABLE RELAY
- 13. MUTING INDICATOR
- 14. TUNER INDICATOR
- 15. TAPE INDICATOR
- 16. F304, SECONDARY FUSE
- 17. TARGET EYE PCB
- 18. F301, PRIMARY FUSE
- 19. RY301, POWER RELAY
- 20. POWER SWITCH PCB
- 21. POWER INDICATOR

Photo: European specification

Note: Marking on transformer and installation manner of the transformer may differ from the photo above.

Remote Control Center RR-700/RMR-90

Schematic Location	Description	Part No.
TRANSISTORS, DIODES AND IC'S		
Q101	2SC1571 (G or H)	301201237
Q301 to 305, 307 to 309, 311 to 315, 319 to 322, 323* ¹	2SC536NP (F or G), or 2SC1815 (GR), or 2SC828 (R or S)	301201234
		301201244
		301201115
Q306, 316, 317 318,	2SA608 (F or G)	301001185
Q310	2SC2274 (E or F)	301201231
D101	NJ1643A, Photo	300717001
D102, 303, 304, 305 to 308, 310 to 330, 341	MA-150 (Si),	300111016
D301, 302	1K188, (Ge)	300111008
D309	WZ-150, Zener, 15V, 0.5W	300313027
D331 to 334	SR1K-4, or	300919024
	DS135D, Rectifier	300919051
D335	KBP-02, Rectifier	300919027
D336, 339, 340	GL-9PR24, LED, (RED)	300414048
D337, 338	GL-9NG24, LED' (GRN)	300414047
IC301	HA1197, Control Signal Amp	303452234
IC302, 303	HD14066BP, Switching	303452270
IC304	NJM4558DD, Audio Amp	303452152
IC305	HA12022, Volume Control	303452286
IC306	μPC78L05, Regulator	303452271
IC307	TC9134P, Controller	303452272
IC308	TC9135P, Function Control	303452258
IC309	HD14027BP, Tape	303452269
OTHERS		
L301	Coil, 38kHz Tune	228641213
T001	Power Transformer (G-type)	
	T-152G, for RR-700	207001535
	T-155G, for RMR-90	207001537
	Power Transformer (D-type)	
	CSA Spec Only	
	T-152D, for RR-700	204001535
	T-155D, for RMR-90	204001537
RY301	Relay, Power, MS24D2-0(M)	240111226
RY302	Relay, Turntable, L-14	240111253
F301	Fuse, 7A, for 120V Area	341222700
	Fuse, F3.15A, for 220/240V Area	345252315
F302, 303	Fuse, 0.5A, for 120V Area	341222050
	Fuse, F500mA, for 220/240V Area	345252050
F304	Fuse, 1A, for 120V Area	341222100
	Fuse, F1A, for 220/240V Area	345252100
X301	Ceramic Resonator, 455kHz	228641213
S1 to 7	Key Board Switch, UP, DOWN, etc.	615212297
S8* ¹	Slide Switch, Tuner/Receiver	613000043
C001	Noise Canceller,	
	NSK-135, for 120V Area	470101118
	PME256MB522, for 220/240V Area	470101136
	Main Circuit Ass'y for RR-700	
	120V Spec	141010216
	220V/240V Spec	141010217
	Main Circuit Ass'y for RMR-90	
	120V Spec	141010221
	220V/240V Spec	141010222

Schematic Location	Description	Part No.
	Fuse Clip, ø6.3	648211257
	Fuse Clip, ø5.2	648211256
	LED Socket, w/Wire (BRN), L=150	648211274
	LED Socket w/Wire (RED), L=150	648211275
	LED Socket w/Wire (ORG), L=150	648211276
	LED Socket w/Wire (YLW), L=150	648211277
	LED Socket w/Wire (GRN), L=300* ¹	648211296
	LED Socket w/Wire (GRN), L=200* ²	648211287
	Pin Jack Board, 4P	624304204
	Pin Jack Board, 2P	624303202
	Voltage Selector* ³	648211247
	Socket, AC Outlet,	
	for U.S.A. Canada etc.	648211255
	for Europe	648211316
	for UK	648211311
	Cord Stopper,	
	Control Cord Mtg	675201116
	Power Cord Mtg	675201114
	Power Cord Mtg, UK only	675201115
	Cord Ass'y w/DIN 10P Plug* ¹	791001157
	Cord Ass'y w/DIN 8P Plug	791001158
	Cord Ass'y w/DIN 3P Plug	791001167
	Signal Cord Ass'y	791001112
	Power Supply Cord,	
	for U.S.A. etc.	796301115
	for Europe, etc.	796301148
	for UK, w/Plug	796301130
	Insulation Cover* ⁴ Noise Canceller	792011220
	Insulation Cover* ³ , Voltage Selector	792011218
	Optical Filter	114902393
	Front Panel Ass'y, for RR-700	111911583
	Front Panel Ass'y, for RMR-90	111911588
	Bonnet, for RR-700	138011327
	Bonnet, for RMR-90	138011331
	Button, UP, DOWN	116210107
	Button, Function	116210110
	Foot	673402027
	Collar, Rubber, ø7 x ø10 x H8	770302120
	Fiber Board w/Al Foil	991001179
	Rubber Sheet, for RR-700	990201353
	Rubber Sheet, for RMR-90	990201233
	Songe, 180 x 8 x 1,	
	Front Panel	990201337
	Felt, 220 x 6 x 1, Rear Panel	990201148
	Sponge, ø4.5 x ø14 x t3	990201343
	Sponge, 20 x 6 x 12, for RR-700	990201350
	Sponge, 20 x 6 x 8, for RMR-90	990201349
	Polyethylene Bag,	
	for RR-700	855004255
	for RMR-90	855004050
	for Owner's Manual	855002332
	Owner's Manual, RR-700	833201417
	Owner's Manual, RMR-90	833201421
	Packing Case, RR-700	812001454
	Packing Case, RMR-90	812001457

Schematic Location	Description	Part No.
	Stylofoam Moulding, RR-700	815001285
	Stylofoam Moulding, RMR-90	815001286
	Screw, M2 x 4 (BLZ), Bind	705222004
	Screw, M3 x 6 (Ni), Bind	705213006
	Screw, M3 x 8 (BLZ), Bind	705223008
	Screw, M4 x 8 (BLZ) w/FW, Bind*1	755224008
	Screw, M3 x 6 (Ni), countersunk	701213006
	Screw, TP3 x 8 (Ni)	726213008
	Screw, TP3 x 8 (BLZ)	726223008
	Screw, TP3 x 10 (BLZ)	726223010
	Screw, TP3 x 6 (Ni), Oval-countersunk	722213006
	Screw, TP3 x 8 (Ni), Oval-countersunk	722213008
	Screw, Tap-tight, 2.6 x 6 (BLK), Bind*2	765222606
	Screw, Tap-tight, 3 x 8 (Ni), Bind	765213008
	Screw, M3 x 5.5 (BLZ), Flat	770911166
	Insertion, M3, L=12	770911268
	GND Screw	770911282
	Nut, M3, Hexagonal	770402201
	Washer, Flat, M3	770500003
	Washer, Spring, M3	770500010

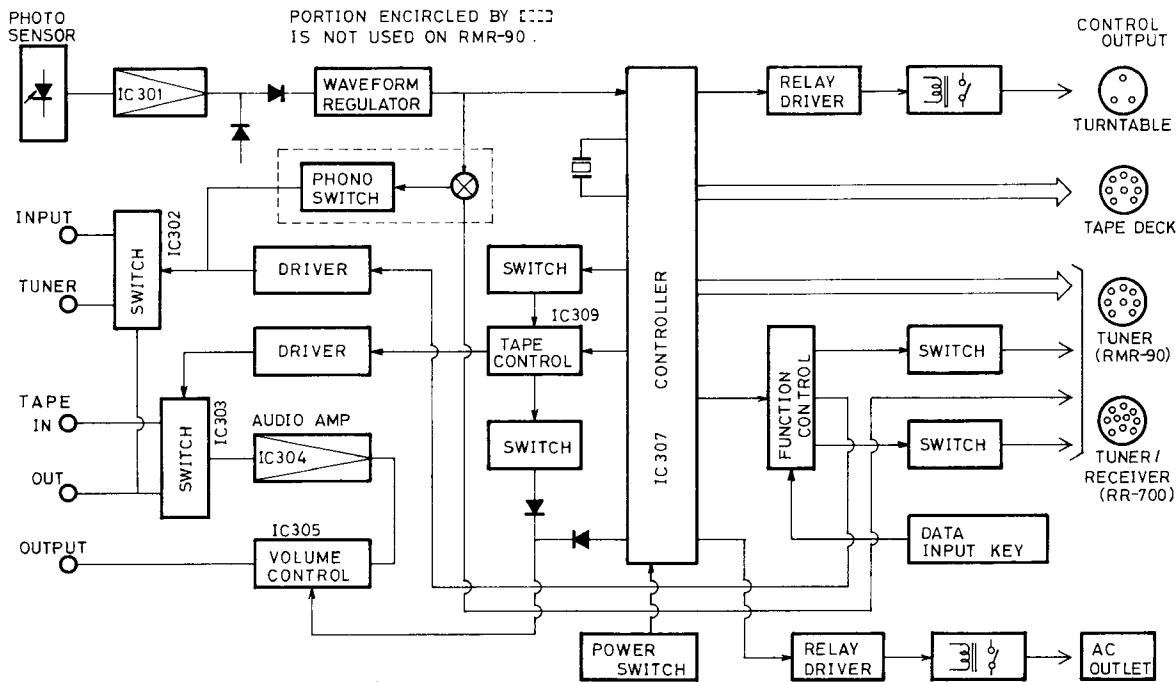
- Notes:**
- *1 Not used on model RMR-90.
 - *2 Not used on model RR-700.
 - *3 Not used for CSA version.
 - *4 Not used on 120 V units.

Remote Control Transmitter RRT-1

Schematic Location	Description	Part No.
TRANSISTORS, DIODES AND IC		
Q101, 102	2SAG08NP (F or G),	301001185
Q103	2SC2274 (E or F),	301201231
D101	LN221RP, LED (RED)	300414050
D102, 103	MA150, (Si),	300111016
D104, 105	NJL1102L, LED (INFRARED)	300414049
IC101	TC9132P, Remote Control Sender	303452273
OTHERS		
X101	Ceramic Resonator, 455kHz	224110008
S101 to 121	Key Board Switch	615212297
	Transmitter P-c Board Ass'y	141811225
	Mould Case w/Optical Filter	114902394
	Panel Ass'y	111911599
	Button, Key Switch	116210108
	Contact Plate, Battery	648211317
	Sponge, 30 x 30 x 3	990201356
	Rubber	990201357
	Polyethylene Bag	855001030
	Screw, TP 3 x 6	726213006

Block Diagram

Schéma synoptique



BLOCK DIAGRAM MODEL RR-700 / RMR-90

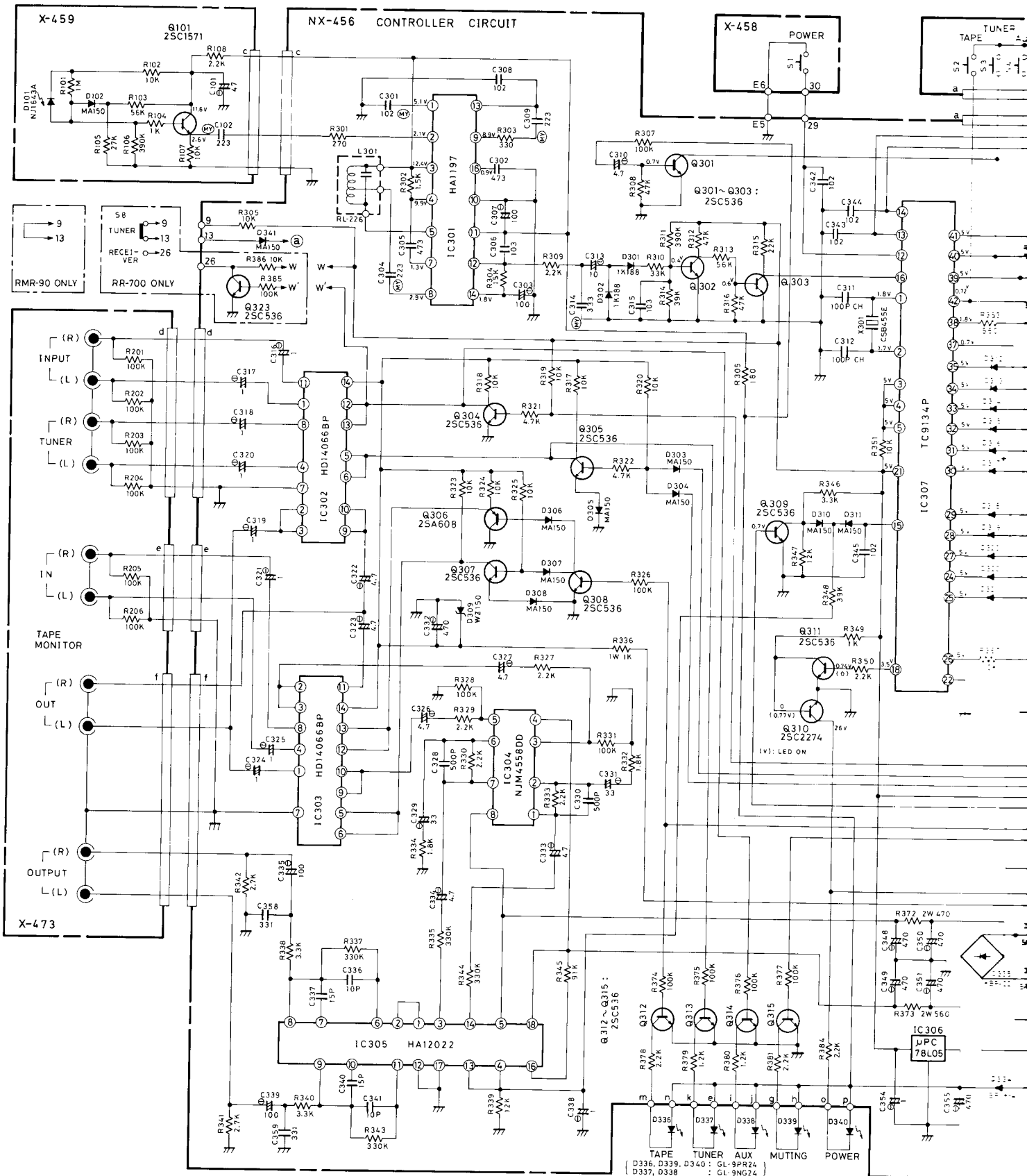
Addendum

1. A ceramic capacitor, 0.1 mfd, 50 V is additionally installed between pin 21 of IC307 (TC-9134) and grounding.
Reason: To prevent malfunction of IC307, possibly resulting from spark induction when the relay is turned on or off.

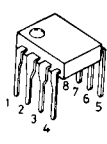
Schematic Diagram

Diagramme schématique

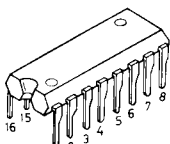
MAIN UNIT RR-700/RMR-90 UNITE PRINCIPALE RR-700/RMR-90



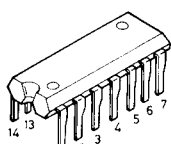
2SC2274
2SA608
2SC536NP
2SC1571



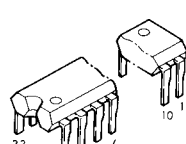
NJM4558DD



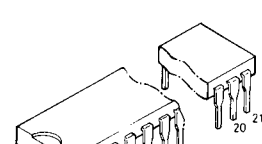
TC9135P
HA1197
HD14027BP



HD14066BP



TC9132P



TC9134P



HA12022

X-460 TRANSMITTER CIRCUIT

CONTROL CENTER CIRCUIT RR-70
CIRCUIT DU UNITE PRINCIPALE RI

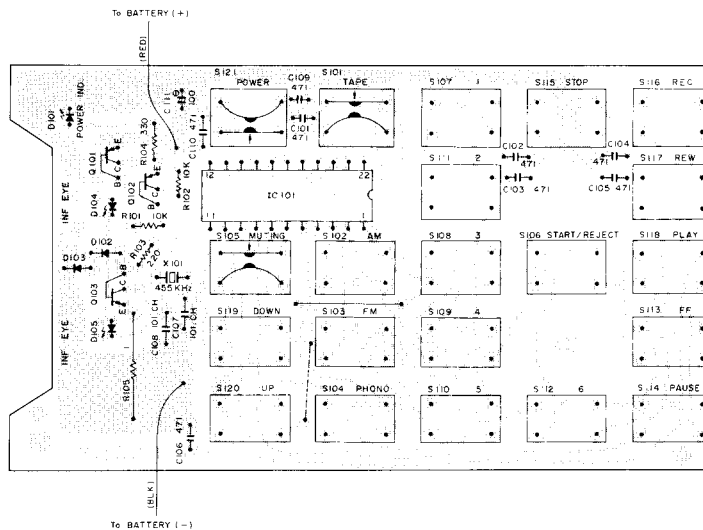
[illegible]

capacitance values are

1.000 pF
1.000 pF
1.000 pF
1.000 pF

cross the point shown and
(range: 120V)
20%

REMOTE CONTROL TRANSMITTER CIRCUIT RRT-1 CIRCUIT DU UNITE EMETTEUR RRT-1



CONTROL CENTER CIRCUIT RR-700/RMR-90 CIRCUIT DU UNITE PRINCIPALE RR-700/RMR-90

- Notes:
- *1 and  are used on model RR-700 only.
 - For RR-700, *2 is connected to TUNER/RECEIVER SWITCH.
For RMR-90, pin 9 is short-circuited to pin 13.

