

SCHEMATIC DIAGRAM OF MC-64A

NOTICE
Since this is a basic schematic diagram, the value of components and some partial connection are subject to be changed for improvement without notice.

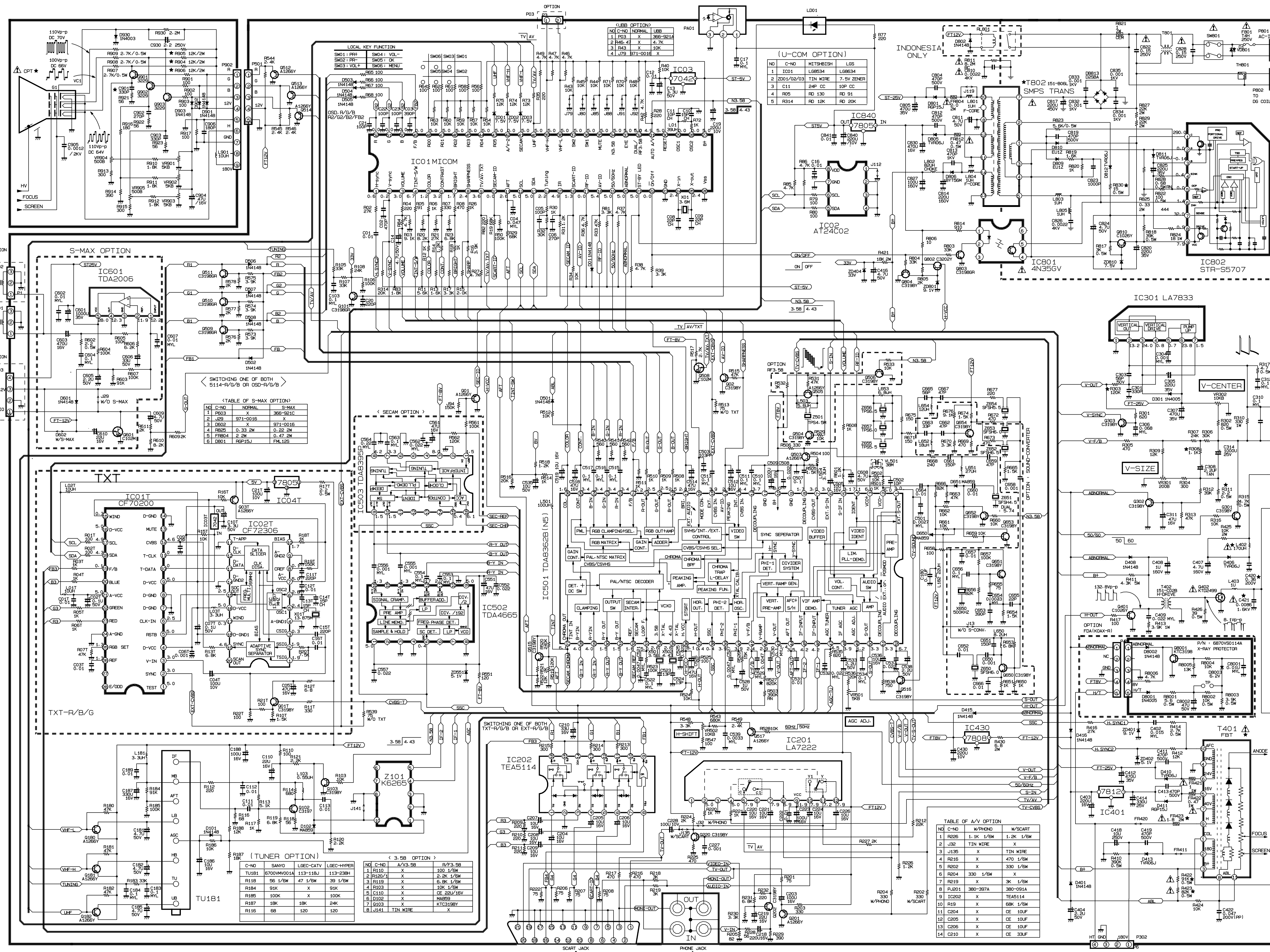
The components marked Δ conform VDE or IEC guidelines and essential for safe operation of the TV receiver, while those marked Δ are required for correct operation. Use specified parts only when replacing.

- VALUE OF RESISTOR, CAPACITOR AND INDUCTOR**
- Resistance is shown in Ohm, K=1,000, M=1,000,000.
 - Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in nF and the values more than 1 in pF.
 - Unless otherwise noted in schematic, all inductor values less than 1 are expressed in uH, and the values less than 1 in H.

- OBSERVATION OF VOLTAGE AND WAVEFORMS**
- Voltages read with VTVM from point to ground. Line voltages 180 - 270 volts, color bar signal.
 - Voltages reading may vary +/- 20 %.
 - The schematic shown is representative only.
 - All waveforms taken using a wide band oscilloscope and a low capacity probe.
 - Check FINE TUNING, AGC, BRIGHTNESS, CONTRAST and COLOR controls for best picture, make sure that BRIGHTNESS and COLOR controls are in mid position and CONTRAST controls is almost in maximum position.
 - Waveforms are taken using a standard color signal.

TABLE OF INCH CONVERSION (*47 changing parts)

CIRCUIT NO.	14"	16" INCH	20"	21"	REMARK
T401	154-064P	154-064P	154-375H	154-375H	FBT
L402	150-L01W	150-L01W	150-L02C	150-L02C	LINEARITY COIL
R208	680	680	1.1K	1.1K	RESI. RD 1/8W
R311	2.2	2.2	2.2	2.2	RESI. RD 0.5W
R423	100K	100K	82K	82K	RESI. RD 0.5W
R422	100K	100K	91K	75K	RESI. RD 0.5W
C420	0.47	0.36	0.36	0.47	CAPA. MFP 200V
C421	6200P	6800P	6800P	6800P	CAPA. MFP 1.6KV
R830	12	12	15	15	RESI. RS 0.5W
R830	151-B06G	151-B06G	151-B06L	151-B06L	TRANS SMP5 S-MAX
T802	151-B06G	151-B06G	151-B05H	151-B05H	TRANS SMP5 S-MAX
P901	381-100F	381-100F	381-026D	381-026D	SOCKET CPT
PCB	111-M54C	111-M54C	111-M54B	111-M54B	PCB MAIN
R304	82	120	300	380	RESI. RD 2W
FR423	3.0	3.0	1.8	1.6	RESI. RF 2W
R919	10K	12K	12K	12K	RESI. RS 2W
R920	10K	12K	12K	12K	RESI. RS 2W
R921	10K	12K	12K	12K	RESI. RS 2W
R901	2700P	2700P	3300P	3300P	CN 50V
C901	470	470	1.5K	470	RESI. RD 1/8W
C409	0.039	0.039	0.022	0.022	CD 100V
R411	4.7K	4.7K	4.3K	4.3K	5W
R303	120K	75K	120K	91K	RESI. RD 1/8W
R827	820K	820K	820K	820K	RESI. RD 1/8W



1. RF/AV/TXT SWITCHING

MODE	SUB MODE	LA7222-2	4	8365-16	U-COM-4	U-COM-5	VIDEO	ALD10
RF	RF(TV)	H	L	H	H	H	H	TV-A
RF	TXT	H	H	H	L	H	RF-SYNC	TV-A
AV	AV-VIDEO	L	L	L	L	L	AV-SYNC	TV-A
AV	AV-TXT	L	L	L	L	L	AV-SYNC	AV-A

2. SAW FILTER SWITCHING

MODE	D102	SAW FILTER 1 AND 3	Q103
PAL	OFF	NOT CONNECT	ON
NTSC	ON	CONNECT	OFF

3. SOUND TRAP SWITCHING

SYSTEM	U-COM(31)	D652	D653	D651	D650	SOUND-TR
PAL	L	ON	OFF	ON	OFF	ON
NTSC	L	OFF	ON	OFF	ON	OFF

4. SOUND FILTER SWITCHING

SYSTEM	U-COM(31)	D652	D653	D651	D650	SOUND-FI
PAL	L	ON	OFF	ON	OFF	ON
NTSC	L	OFF	ON	OFF	ON	OFF

5. H-SHIFT

V-FREQ.	U-COM(19)	D517	D517	D517	D517	H-SHIFT
50Hz	L	ON	DOWN	RIGHT	NTSC	SYSTEM
50Hz	H	OFF	UP	LEFT	P/S	SYSTEM

6. V-CENTER SHIFT

V-FREQ.	U-COM(19)	D517	D517	D517	D517	V-CENTER
60Hz	L	OFF	ON	DOWN	SYSTEM	SYSTEM
50Hz	H	OFF	ON	UP	SYSTEM	SYSTEM

7. SYSTEM CONTROL (AUTO)

S-ID(16)	V-FREQ.	SYSTEM	3.58-SW(31)	50/60(19)	TINT-SW(4)	TINT-CONTROL
H	50Hz	SECAM	H	H	H	X
L	60Hz	PAL	L	H	H	X
L	60Hz	N3.58	L	L	M	0
L	60Hz	N3.58	L	L	M	0

B. SYSTEM CONTROL (FORCED)

SYSTEM	3.58-SW(31)	50/60(19)	TINT-SW(4)	TINT-CONTROL
PAL	H	H	H	X
L	60	PAL	H	H
L	60	N3.58	L	L
L	60	N4.43	H	L

9. SYSTEM CONTROL (A/V)

S-ID(16)	V-FREQ.	SYSTEM	3.58-SW(31)	50/60(19)	TINT-SW(4)	TINT-CONTROL
H	50	SECAM	H	H	H	X
L	60	PAL	H	H	H	X
L	60	N3.58	L	L	L	1 - 3.5
L	60	N4.43	H	L	L	1 - 3.5

10. AV-ID/SHARPNESS

PICTURE	TDAB362(14)	D02	U-COM(17)	REMARKS
NO SIGNAL	L	OFF	H	AV DISPLAY ON SCREEN
SIGNAL	1.5 - 41V	ON	L	VOLT. IS CHANGED BY SHARPNESS