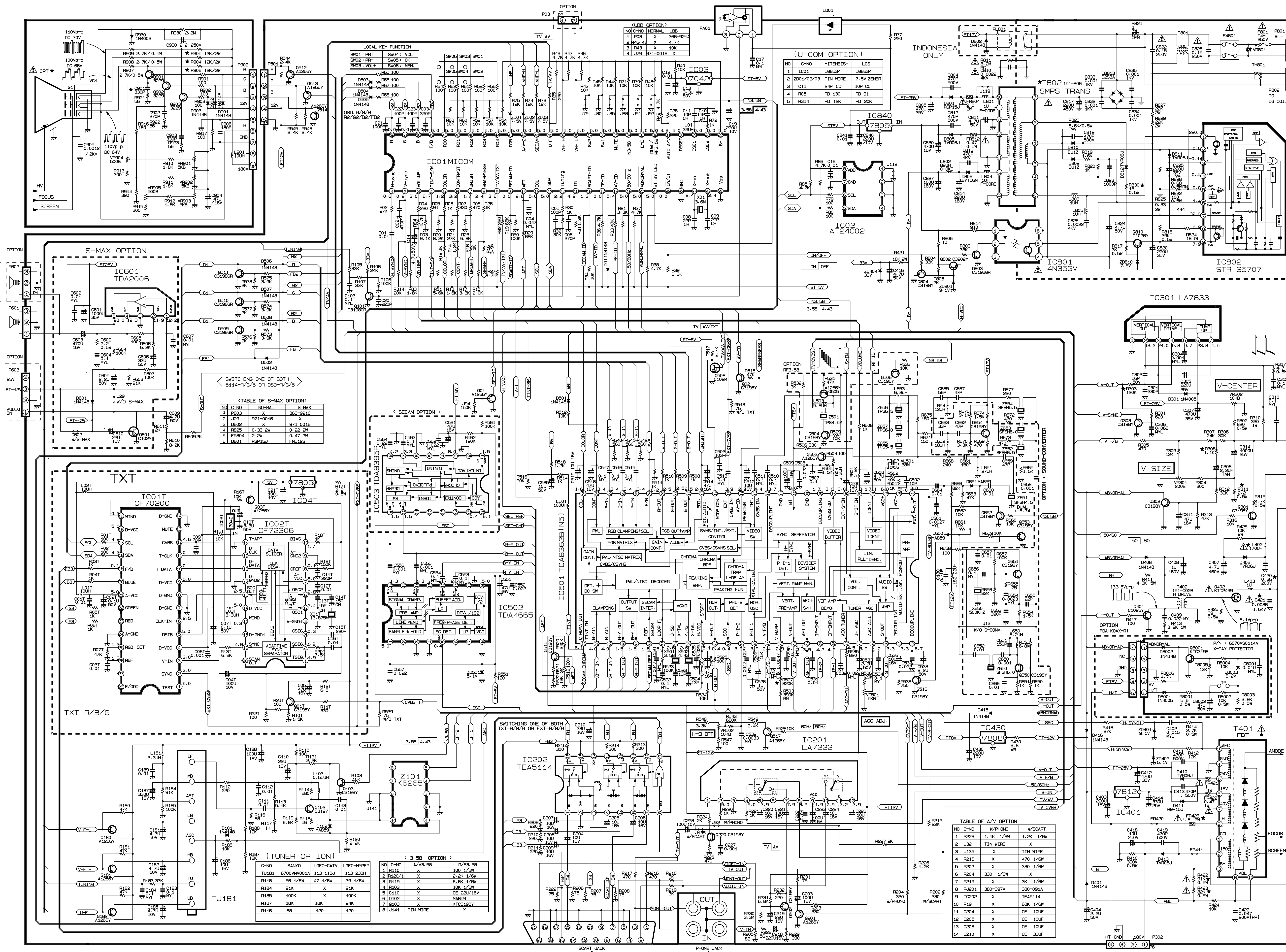


# SCHEMATIC DIAGRAM OF MC-64A



**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  $\Delta$  conform VDE or IEC guidelines and essential for safe operation of the TV receiver, while those marked  $\nabla$  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 are in  $\mu$ F.
  - Unless otherwise noted in schematic, all inductor values less than 1 are expressed in  $\mu$ H, and the values less than 1 are in nH.
- 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  $\pm$  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 )**

IC/ROUT NO.	14"	16" (ONCH)	20"	21"	REMARK
T401	154-064P	154-064P	154-379H	154-379F	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	381-226D	381-226D	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	1.9K	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
R27	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	H	H	H	H	H
RF	TXT	H	H	H	H	H	H
AV	AV-VIDEO	L	L	L	L	L	L
AV	AV-TXT	L	L	L	L	L	L

**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)	0202	0203	0201	0205	0204	0202	Z501
PAL	L	ON	OFF	ON	OFF	ON	OFF	OFF
NTSC	L	OFF	ON	OFF	ON	OFF	ON	OFF

**4. SOUND FILTER SWITCHING**

SYSTEM	U-COM(31)	0202	0203	0201	0205	0204	0202	0202	0202	0202
PAL	L	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
NTSC	L	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF

**5. H-SHIFT**

V-FREQ.	U-COM(19)	0517	0517	0517	0517	0517	0517	0517
50Hz	L	ON	DOWN	RIGHT	NTSC			
50Hz	L	OFF	UP	LEFT	P/S			

**6. V-CENTER SHIFT**

V-FREQ.	U-COM(19)	0301	IV	V-CENTER
60Hz	L	OFF	ON	DOWN
50Hz	L	ON	UP	UP

**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	50Hz	PAL	H	H	H	X
L	60Hz	NT-43	L	L	M	0
L	60Hz	NT-58	L	L	M	0

**8. SYSTEM CONTROL (FORCED)**

SYSTEM	3.58-SW(31)	50/60(19)	TINT-SW(4)	TINT-CONTROL
PAL	H	H	H	X
L	50	PAL	H	H
L	60	NT-58	L	L
L	60	NT-43	L	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	50Hz	SECAM	H	H	H	X
L	50Hz	PAL	H	H	H	X
L	60Hz	NT-43	L	L	M	0
L	60Hz	NT-58	L	L	M	0

**10. AV-ID/SHARPNESS**

PICTURE	TDAB362(14)	002	U-COM(17)	REMARKS
NO SIGNAL	L	OFF	H	AV DISPLAY ON SCREEN
SIGNAL	1.5 - 41V	ON	L	VOLT. IS CHANGED BY SHARPNESS