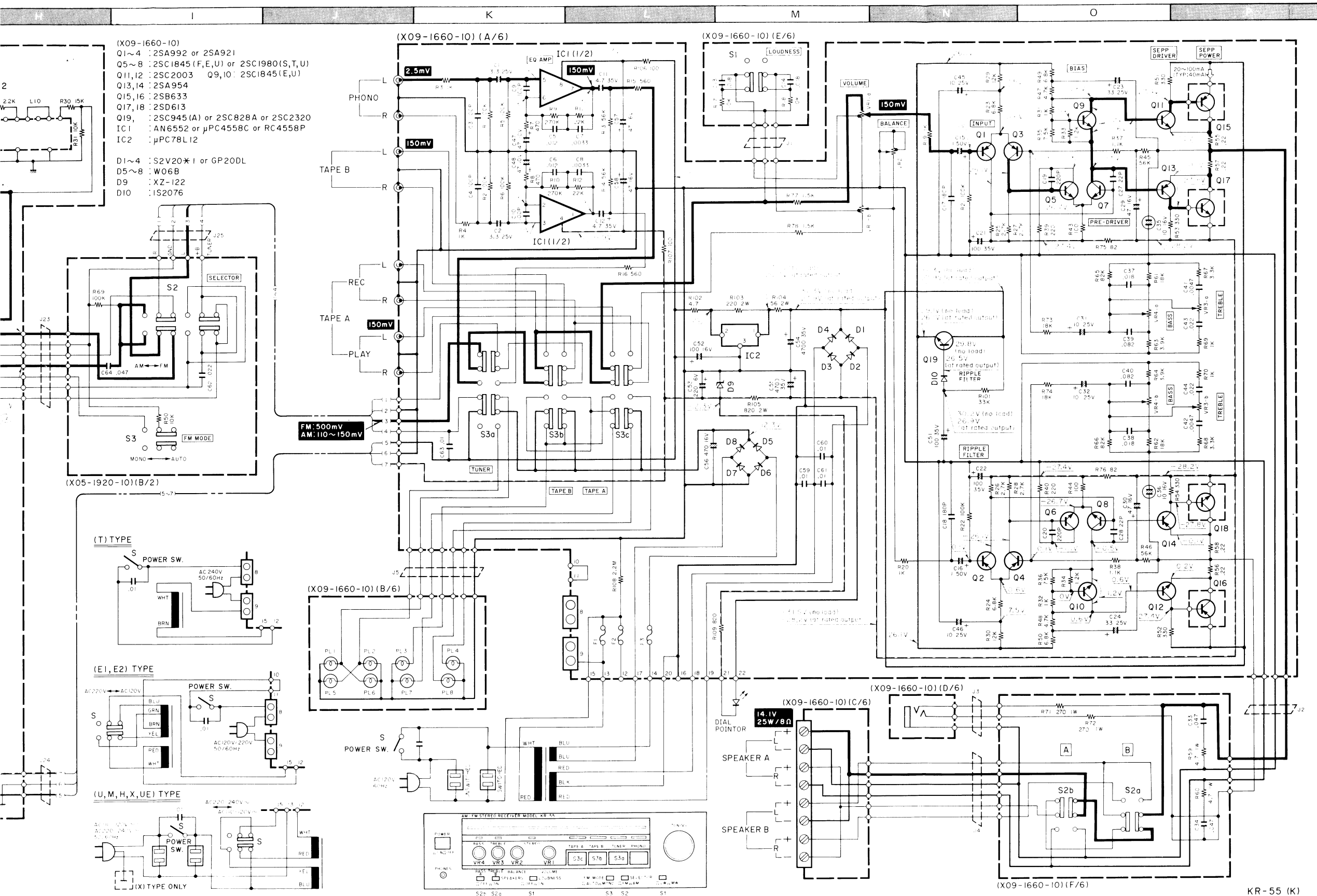




# AM-FM STEREO RECEIVER

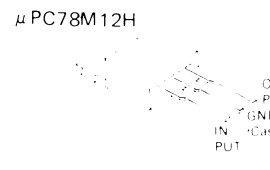
# KR-55



## SPECIFICATIONS

POWER AMPLIFIER SECTION	
<b>Power Output</b>	28 watts* per channel minimum RMS, both channels driven at 8 ohms from 40 Hz to 20,000 Hz with no more than 0.09% total harmonic distortion.
<b>Both Channels Driven</b>	
Into 8 ohms at 1,000 Hz	8W + 8W
Into 4 ohms at 1,000 Hz	8W + 8W
<b>Dynamic Power Output at 4 ohms</b>	16W + 16W
<b>Total Harmonic Distortion (40 Hz to 20 kHz from AUX) rated power into 8 ohms</b>	0.09%
1 watt power into 8 ohms	0.04%
<b>Intermodulation Distortion (60 Hz - 7 kHz - 4 1 SMPTE) rated power into 8 ohms</b>	0.04%
1 watt power into 8 ohms	0.02%
<b>Damping Factor</b>	16 @ 1,000 Hz
<b>Input Sensitivity Impedance</b>	
PHONO	200k, 40k, 10k
TAPE, AUX	10k, 10k, 10k
<b>Signal-to-Noise Ratio (A weighted) PHONO</b>	72 dB @ 250mV input 76 dB @ 500mV input 78 dB @ 1,000mV input
<b>TAPE, AUX</b>	
<b>Maximum PHONO Input Level at 1,000 Hz</b>	1.5V RMS (100dB)
<b>Frequency Response</b>	
PHONO RIAA Standard Curve	20Hz - 20kHz +0.3dB
TAPE, AUX	10Hz - 20kHz +0dB - 3dB
<b>Tone Control</b>	
BASS	+18 dB @ 100Hz
TREBLE	+18 dB @ 10 kHz
<b>Loudness Control (VOL)</b>	+30 dB
<b>Output Level Impedance</b>	
TAPE REC Out (Pin)	16k, 100k, 10k
<b>FM TUNER SECTION</b>	
<b>Usable Sensitivity</b>	10.8 dB @ 100kHz
<b>50 dB Quieting Sensitivity</b>	
Mono	17.2 dB @ 100kHz
Stereo	17.2 dB @ 100kHz
<b>Signal-to-Noise Ratio at 65 dBf</b>	
Mono	74 dB
Stereo	74 dB
<b>Total Harmonic Distortion at 1,000 Hz</b>	
Mono	0.1%
Stereo	0.2%
<b>Frequency Response</b>	80 Hz - 15 kHz +0.2 dB - 20 dB
<b>Capture Ratio</b>	14 dB
<b>Image Rejection Ratio</b>	50 dB
<b>Spurious Response Ratio</b>	80 dB
<b>IF Response Ratio</b>	90 dB
<b>Alternate Channel Selectivity</b>	45 dB @ 100 kHz
<b>AM Suppression Ratio</b>	65 dB
<b>Stereo Separation Ratio</b>	40 dB @ 1,000 Hz 45 dB @ 100 kHz
<b>Subcarrier Product Ratio</b>	45 dB
<b>Antenna Impedance</b>	25 ohm unbalanced 50 ohm balanced
<b>FM Frequency Range</b>	87.5 MHz - 108 MHz
<b>AM TUNER SECTION</b>	
<b>Usable Sensitivity</b>	17.4 dB
<b>Signal-to-Noise Ratio</b>	71 dB
<b>Image Rejection</b>	41 dB
<b>Selectivity</b>	41 dB
<b>GENERAL</b>	
<b>Power Consumption</b>	120W @ 120V 100W @ 100V 80W @ 80V 60W @ 60V
<b>AC Outlets</b>	120V, 100V, 80V, 60V
<b>Dimensions</b>	17 1/2" x 13 1/2" x 4 1/2"
<b>Weight (Net)</b>	11.5 lbs
<b>(Gross)</b>	13.5 lbs

\*DC voltages are measured by a VOM at 25 k $\Omega$  input impedance.

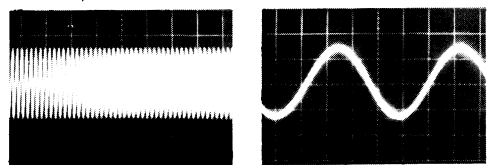


# WAVEFORMS AT CHECK POINTS



# AM-FM STEREO

- ① IF out  
0.5 μs/cm, 10 mV/cm
- ⑦ Tuner out  
0.2 ms/cm, 50 mV/cm



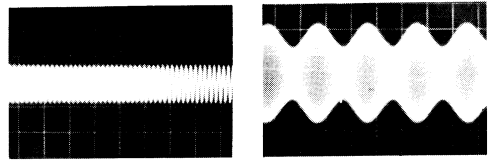
- ② Q1 base  
0.5 μs/cm, 10 mV/cm
- ⑧ IC3-2  
0.5 ms/cm, 5 mV/cm



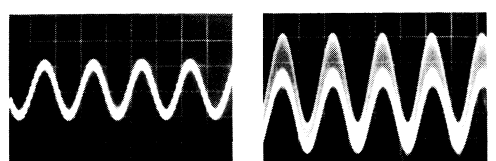
- ③ Q1 collector  
0.5 μs/cm, 10 mV/cm
- ⑨ IC3-5  
0.5 ms/cm, 5 mV/cm



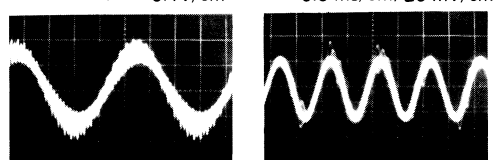
- ④ IC1-1  
0.5 μs/cm, 10 mV/cm
- ⑩ IC3-9  
0.5 ms/cm, 5 mV/cm



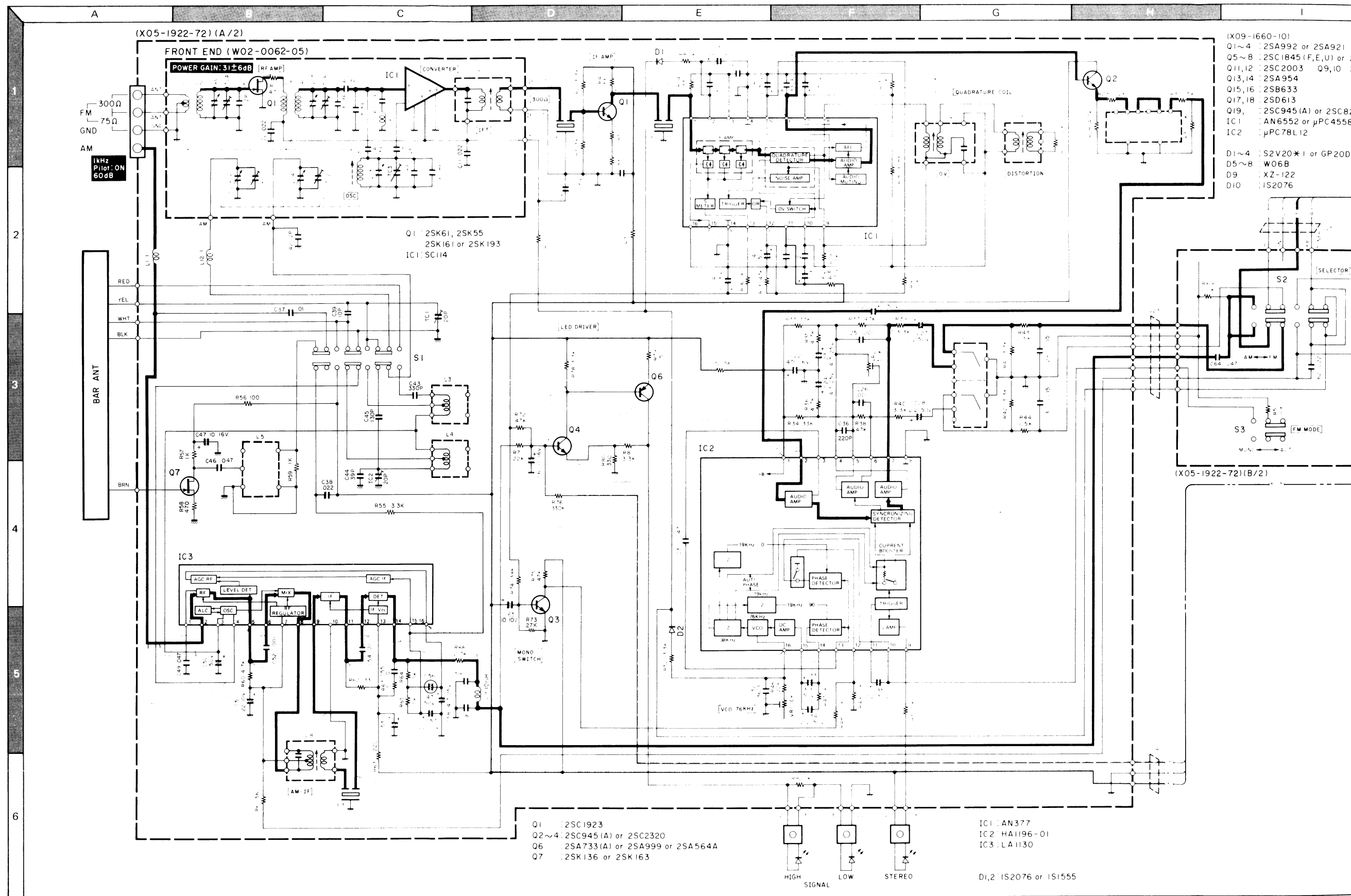
- ⑤ IC1-6  
0.5 μs/cm, 50 mV/cm
- ⑪ IC3-14  
0.5 ms/cm, 20 mV/cm



- ⑥ IC2-7  
0.2 ms/cm, 0.1V/cm
- ⑬ R66 and L9 AM out  
0.5 ms/cm, 20 mV/cm

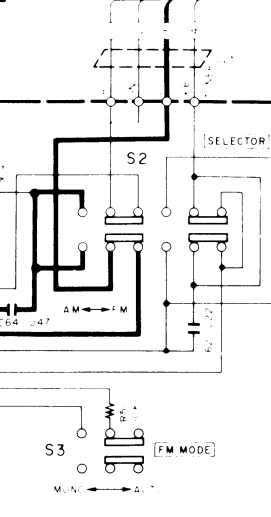


SEMICONDUCTOR SUBSTITUTIONS	
NAME	SUBSTITUTIONS
X09-166	
Q5 ~ 8	2SC1775
Q11, 12	2SC1735
Q13, 14	2SA850
Q15, 16	2SB690 (C)
Q17, 18	2SD726 (C)
D9	Zener voltage, 12V
IC1	NJM4558



- 2SA733
- 2SA954
- 2SA992
- 2SC828
- 2SC945
- 2SC1923
- 2SC2003
- 2SC2320
- 2SB633
- 2SD613
- 2SA921
- 2SC1980
- 2SK136
- 2SK163
- HA1196
- AN6552
- RC4558P
- AN377
- LA1130
- #PC78M12H

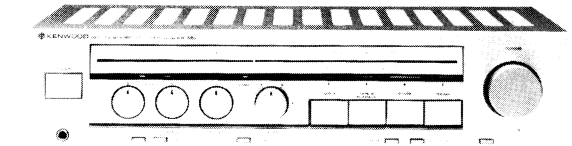
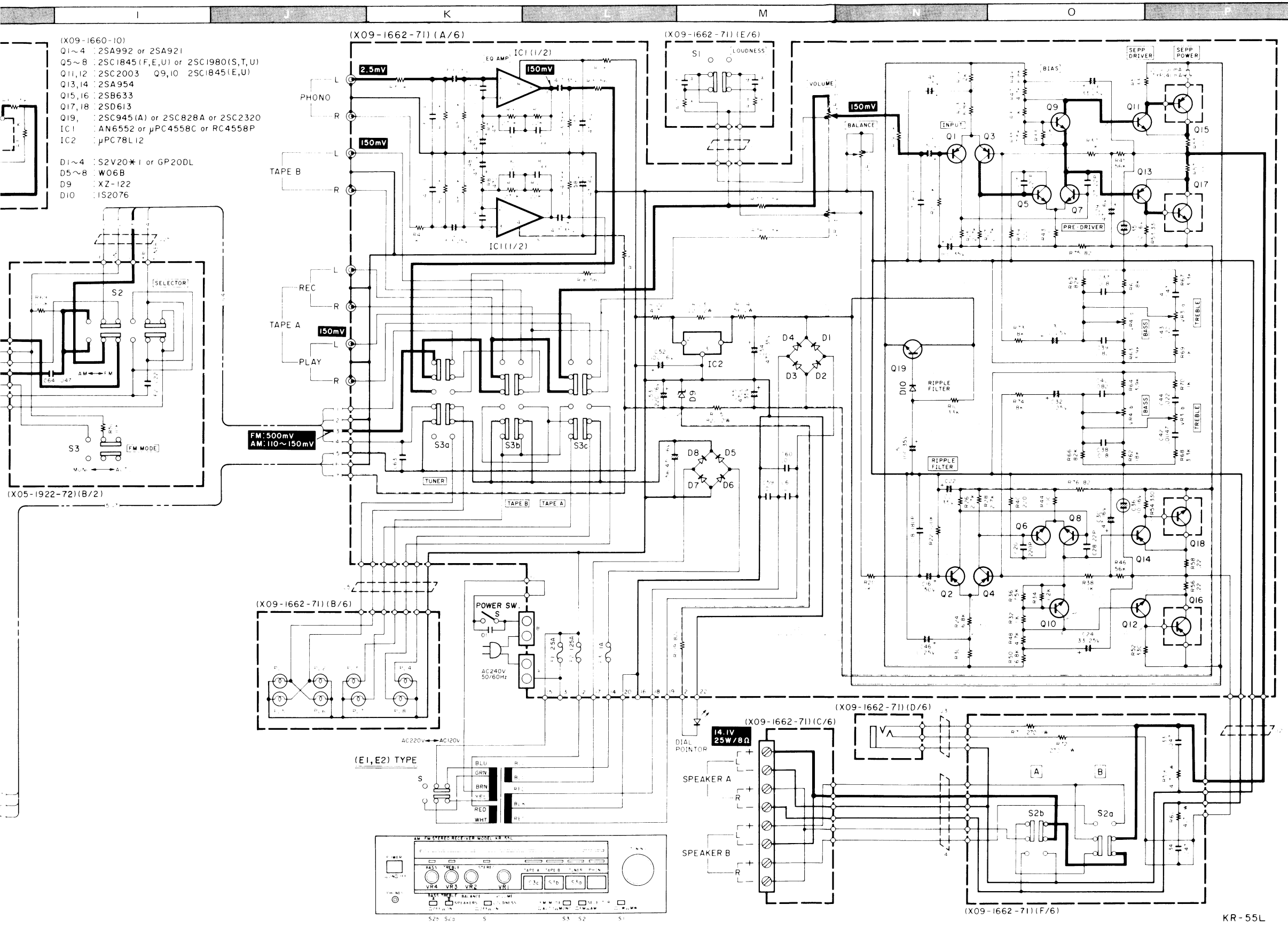
- (X09-166-10)
- Q1~4 : 2SA992 or 2SA921
- Q5~8 : 2SC1845 (F,E,U) or
- Q11,12 : 2SC2003 Q9,10
- Q13,14 : 2SA954
- Q15,16 : 2SB633
- Q17,18 : 2SD613
- Q19, : 2SC945 (A) or 2SC828
- IC1 : AN6552 or μPC4558
- IC2 : μPC78L12
- D1~4 : S2V20\*1 or GP200
- D5~8 : W06B
- D9 : XZ-122
- D10 : IS2076



(X05-1922-72) (B/2)

# -FM STEREO RECEIVER

# KR-55L



## SPECIFICATIONS

### AUDIO SECTION

Rated Power Output	8 ohms at 40 Hz to 20 kHz	no more than 0.09% T.H.D. (FTC)	28W + 28W
	4 ohms at 63 Hz to 12.5 kHz	no more than 0.7% T.H.D. (IEC)	28W + 28W
Total Harmonic Distortion	Rated Power Output into 8 ohms		0.09%
Intermodulation Distortion			0.04%
Frequency Response	10 Hz ~ 100 kHz		+0 dB -3 dB

### S/N Weighted: Rated Output Power (IEC-A)

( ) = Unweighted, at 50 mV (DIN)		
Phono		78 dB (55 dB)
Tape, Aux		100 dB (60 dB)
Damping Factor at 8 ohms, 1 kHz		30
Input Sensitivity/Impedance		
Phono		2.5 mV/50 kΩ
Tape, Aux		150 mV/50 kΩ
Tone Control		
Bass 100 Hz		+8 dB
Treble 10 kHz		+8 dB
Loudness Control (-30 dB)		+10 dB at 100 Hz

### FM TUNER SECTION

Sensitivity at 75 ohms		
Mono: S/N 26 dB, 40 kHz Dev.		0.9 μV
Stereo: S/N 46 dB, 46 kHz Dev.		25 μV
Limiting Level		0.9 μV
-3 dB Point, 40 kHz Dev.		
Frequency Response	30 Hz ~ 15 kHz	+0.2 dB -2.0 dB

### Total Harmonic Distortion

Mono: 1 kHz, 40 kHz Dev.	0.15%
Stereo: 1 kHz, 46 kHz Dev.	0.3%

### S/N Weighted (IEC-A)

Mono: 40 kHz Dev., 1 mV Input	70 dB
Stereo: 46 kHz Dev., 1 mV Input	65 dB
S/N Ratio (IHF)	
Mono: 75 kHz Dev., 1 mV Input	75 dB
Stereo: 75 kHz Dev., 1 mV Input	70 dB

### FM Stereo Separation: 1 mV Input (DIN)

250 Hz	38 dB
1 kHz	40 dB
6.3 kHz	35 dB
12.5 kHz	30 dB
Image Rejection Ratio	50 dB

### Selectivity

300 kHz, 20 dB Input	70 dB
IF Rejection Ratio	90 dB
AM Suppression Ratio	65 dB
Spurious Response Ratio	80 dB
Capture Ratio	1.5 dB

### MW TUNER SECTION

Sensitivity S/N 20 dB	13 μV
S/N Ratio: 1 mV Input	48 dB
Image Rejection Ratio	45 dB

### LW TUNER SECTION

Sensitivity S/N 20 dB	14 μV
S/N Ratio: 1 mV Input	48 dB
Image Rejection Ratio	55 dB

### GENERAL

Power Consumption	
Rated Power at 8 ohms	120W
No signal	22W
Dimensions	W: 440 mm
	H: 109 mm
	D: 250 mm
Weight (net)	5.2 kg

M12H

