

WM-F2078

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model*



Model Name Using Similar Mechanism	WM-AF23/BF23
Tape Transport Mechanism Type	MF-WMF2078-19

SPECIFICATIONS

Radio section

Frequency range FM: 87.5 – 108 MHz
 AM: **US, Canadian, E model :**
 530 – 1,710 kHz (10 kHz step)
AEP, UK model :
 531 – 1,602 kHz (9 kHz step)

Antennas FM: Headphone cord antenna
 AM: Built-in ferrite bar antenna

Tape player section

Frequency response (Dolby NR off)
 30 – 15,000 Hz

Power output 10 mW + 10 mW, 16 ohms at DC operation

Output Headphones (stereo minijack): load impedance 8 – 300 ohms

Power requirements
 3 V DC, two R6 (size AA) batteries
 DC IN 3 V jack accepts:
 Optional Sony EBP-500B battery case for use with R20 (size D) batteries
 Optional Sony AC-D2M AC power adaptor
US, Canadian model :
 120 V AC, 60 Hz
UK model :
 240 V AC, 50 Hz
AEP model :
 220 V AC, 50 Hz
E model :
 120 V AC, 60 Hz or 220 V AC, 50 Hz
 Optional Sony DCC-70 car battery cord for use with 12 V car battery

Battery life Approx. 6 hours of tape playback and approx. 16 hours of FM reception, using Sony alkaline batteries AM3 (N)

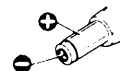
Dimensions Approx. 97 × 119 × 43 mm (w/h/d) not incl. projecting parts and controls

Weight Approx. 330 g, incl. batteries

Accessories supplied
 Belt clip (1)
 Canadian, European and UK model: Stereo headphones (open-air type, 1)
 Other model: Stereo earphones (open-air type, 1)

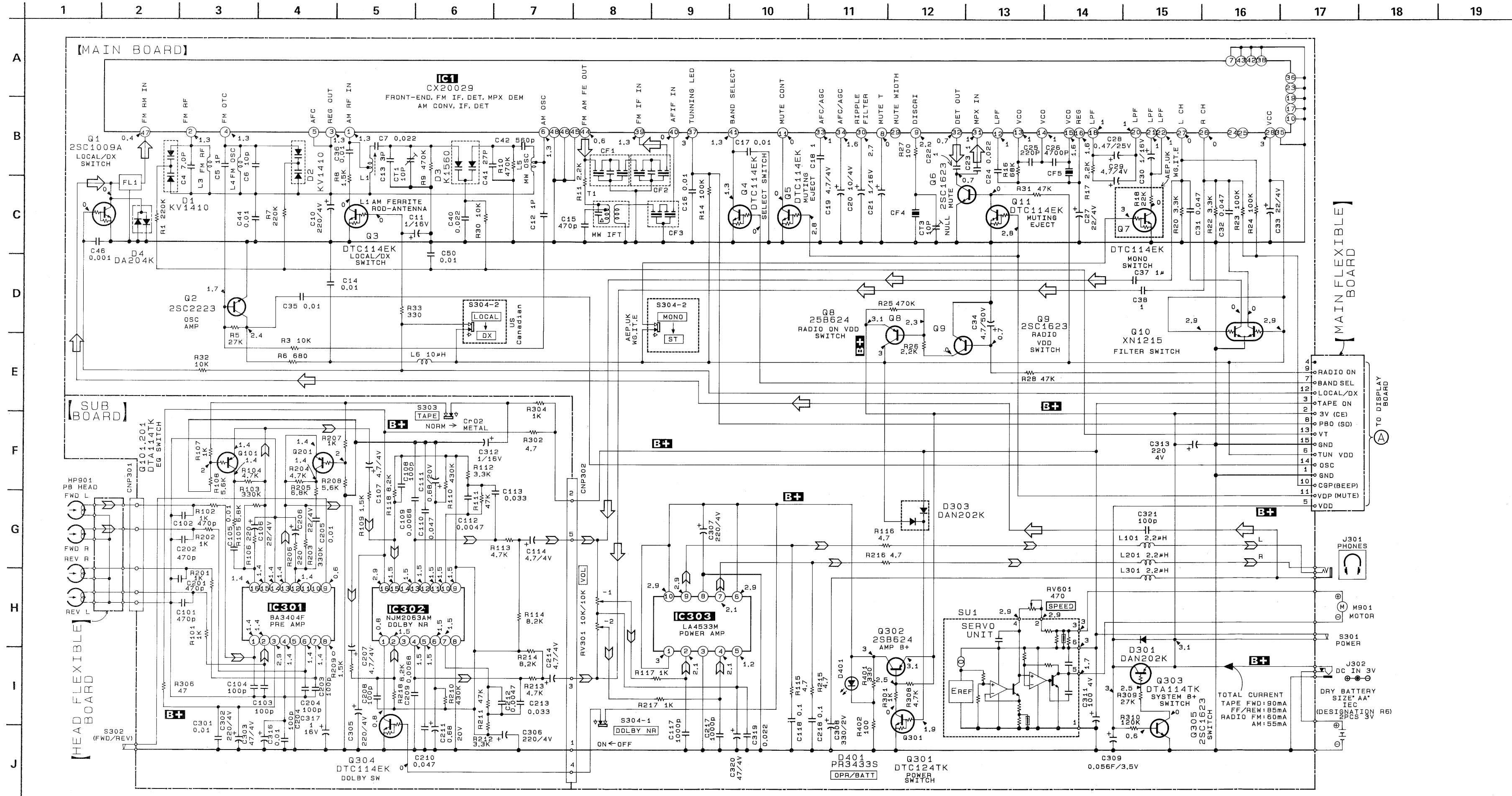
Design and specifications subject to change without notice.

Note: If an AC power adaptor or a car battery cord not manufactured by Sony is used, a fuse must be installed in the AC power adaptor or the car battery cord and the polarity of the plug must be as illustrated.



RADIO CASSETTE PLAYER
SONY®

5-3. SCHEMATIC DIAGRAM — MAIN SECTION —



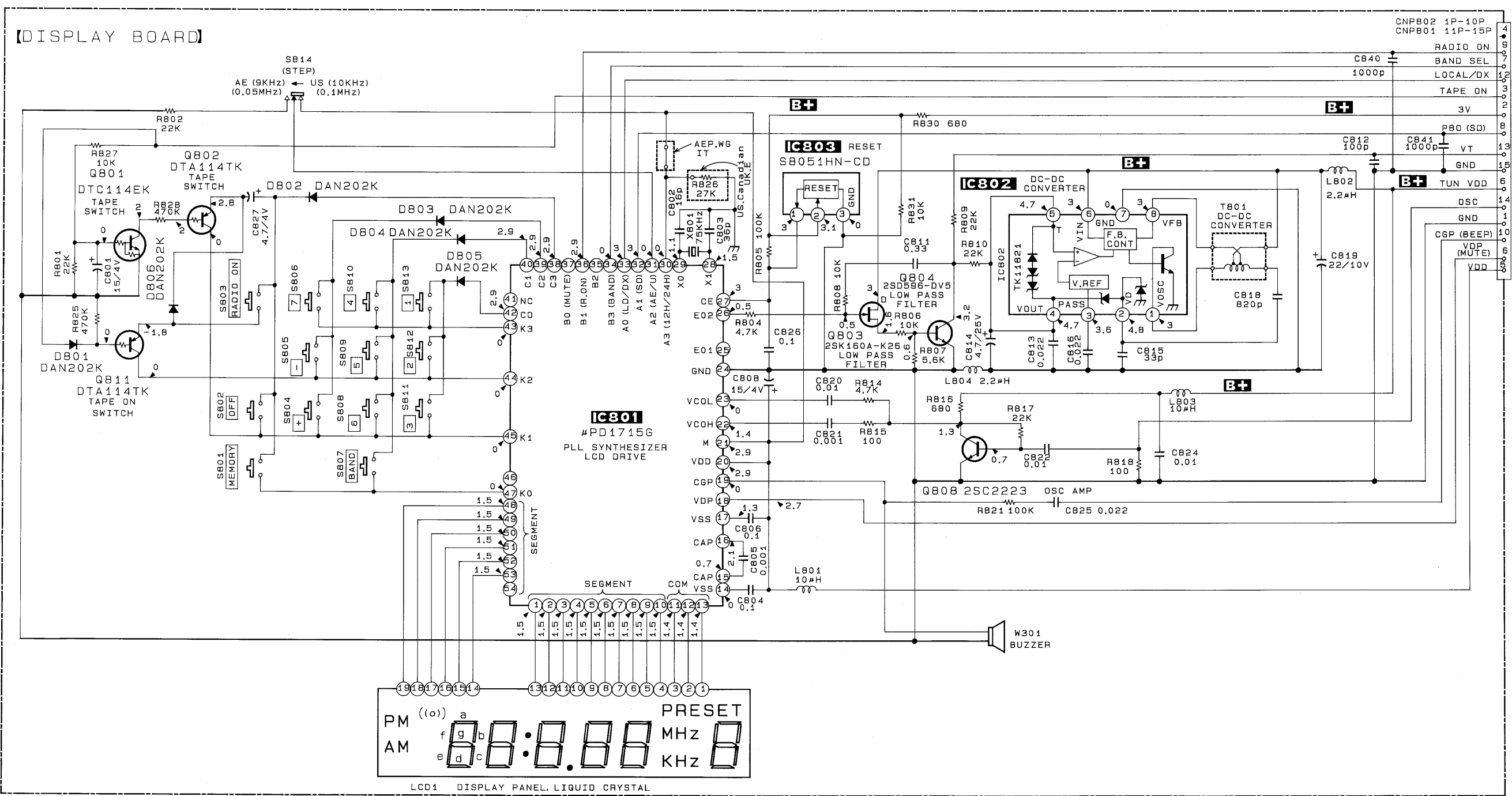
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μpF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- \triangle : internal component.
- **B+**: B+ Line
- **B-**: B- Line
- \square : adjustment for repair
- Total current is measured with no cassette installed.
- Power voltage is dc 3V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10M Ω)
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
 - \rightarrow : FM
 - \rightarrow : PB
- WG: West Germany Model
IT: Italian Model

5-4. SCHEMATIC DIAGRAM — DISPLAY SECTION —

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A
B
C
D
E
F
G
H
I



TO MAIN BOARD