

XR-C5100

SERVICE MANUAL

US Model
Canadian Model
E Model



Model Name Using Similar Mechanism	XR-4800
Tape Transport Mechanism Type	MG-25F-136

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
17 watts per channel minimum continuous average power into 4 ohms,
4 channels driven from 20 Hz to 20 kHz with no more than 1% total
harmonic distortion.

Cassette player section

Tape track 4-track 2-channel stereo
Wow and flutter 0.08% (WRMS)
Frequency response 30 – 18,000 Hz
Signal-to-noise ratio 58 dB

Tuner section

FM

Tuning range FM tuning interval:
87.5 – 107.9 MHz
(US, Canadian model)
50 kHz/200 kHz switchable
87.5 – 108.0 MHz (at 50 kHz step)
87.5 – 107.9 MHz (at 200 kHz step)
(E model)
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz
Usable sensitivity 8 dBf
Selectivity 75 dB at 400 kHz
Signal-to-noise ratio 65 dB (stereo),
68 dB (mono)
Harmonic distortion at 1 kHz
0.5% (stereo),
0.3% (mono)
Separation 35 dB at 1 kHz
Frequency response 30 – 15,000 Hz
Capture ratio 2 dB

AM (MW)

Tuning range AM tuning interval:
530 – 1,710 kHz
(US, Canadian model)
MW tuning interval:
9 kHz/10 kHz switchable
531–1,602 kHz (at 9 kHz step)
530 – 1,710 kHz (at 10 kHz step)
(E model)
Antenna terminal External antenna connector
Intermediate frequency 10.71 MHz/450 kHz.
Sensitivity 30 μ V

SW (E model)

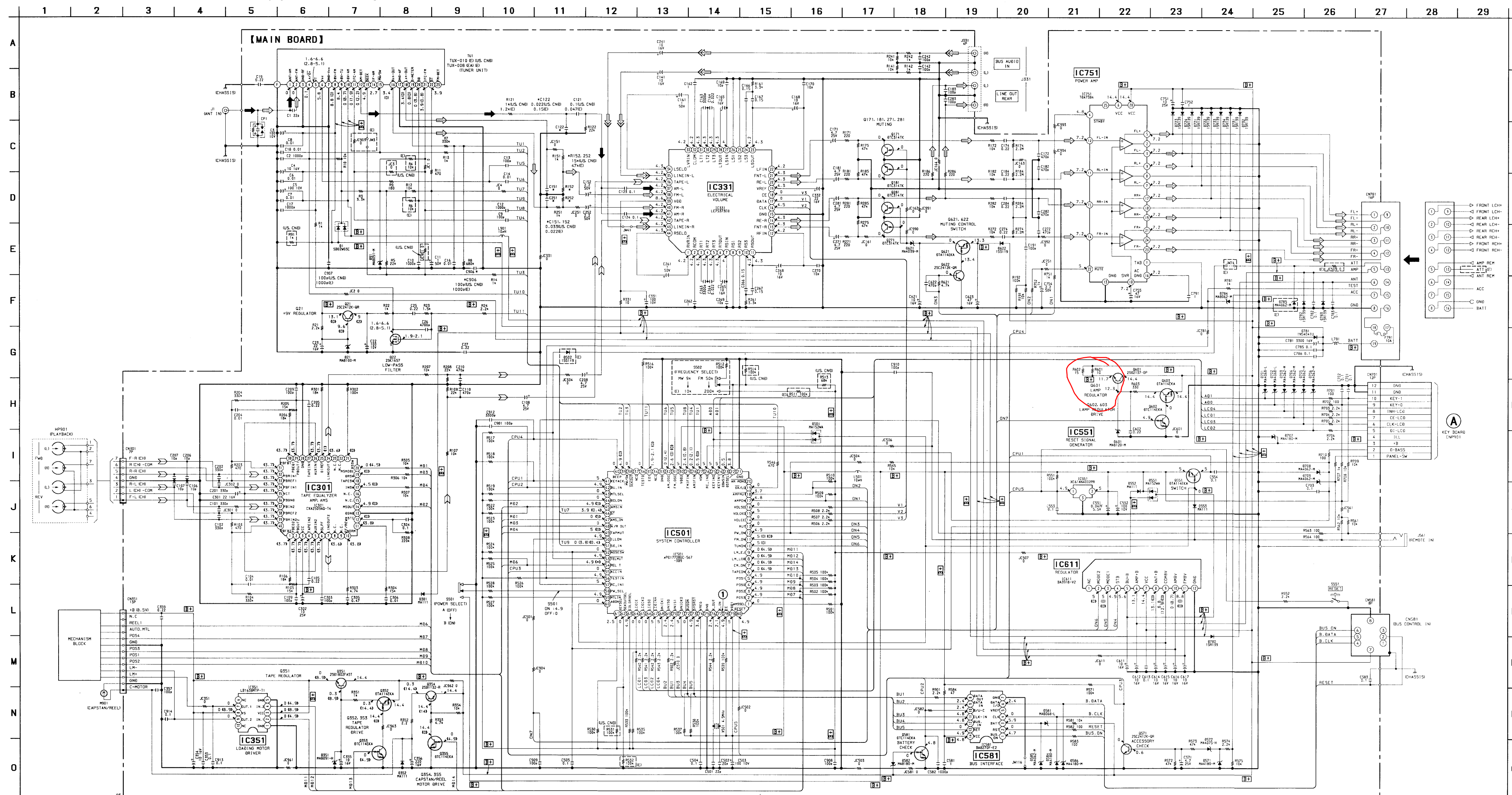
Tuning range SW tuning interval:
SW1: 2,940 – 7,735 kHz
SW2: 9,500 – 18,135 kHz
(except for 10,140 – 11,575 kHz)
Antenna terminal External antenna connector
Intermediate frequency 10.71 MHz/450 kHz
Sensitivity 50 μ V

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US, Canadian Model
FM/AM CASSETTE CAR STEREO
E Model
FM/MW/SW CASSETTE CAR STEREO

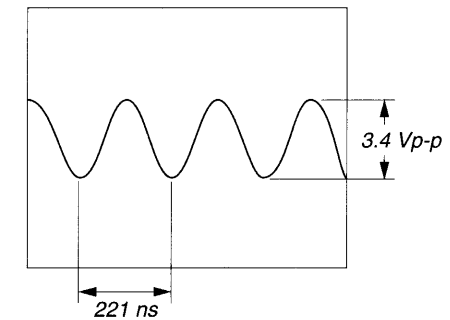


SONY®



• Waveform

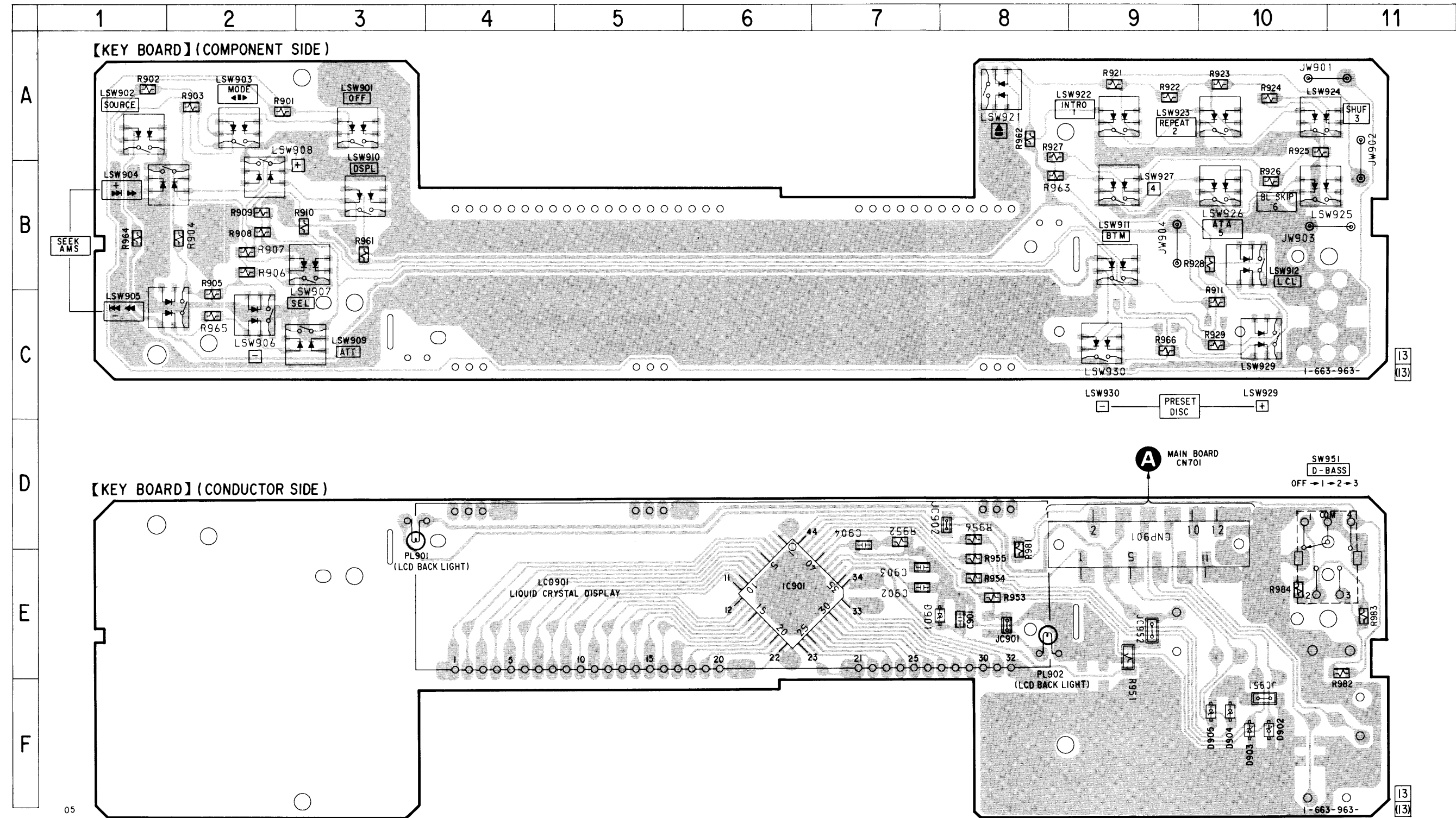
① IC501 (X_IN)



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μF 50 WV 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.
- Δ : internal component.
- \square : panel designation.
- $\text{B}+$: B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- (): AM (MW)
- (()): TAPE PLAYBACK
- *: Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path:
 - \rightarrow : FM
 - \rightarrow : AM (MW)
 - \rightarrow : TAPE PLAYBACK
 - \rightarrow : BUS AUDIO IN

6-4. PRINTED WIRING BOARD – PANEL Section –



• Semiconductor Location

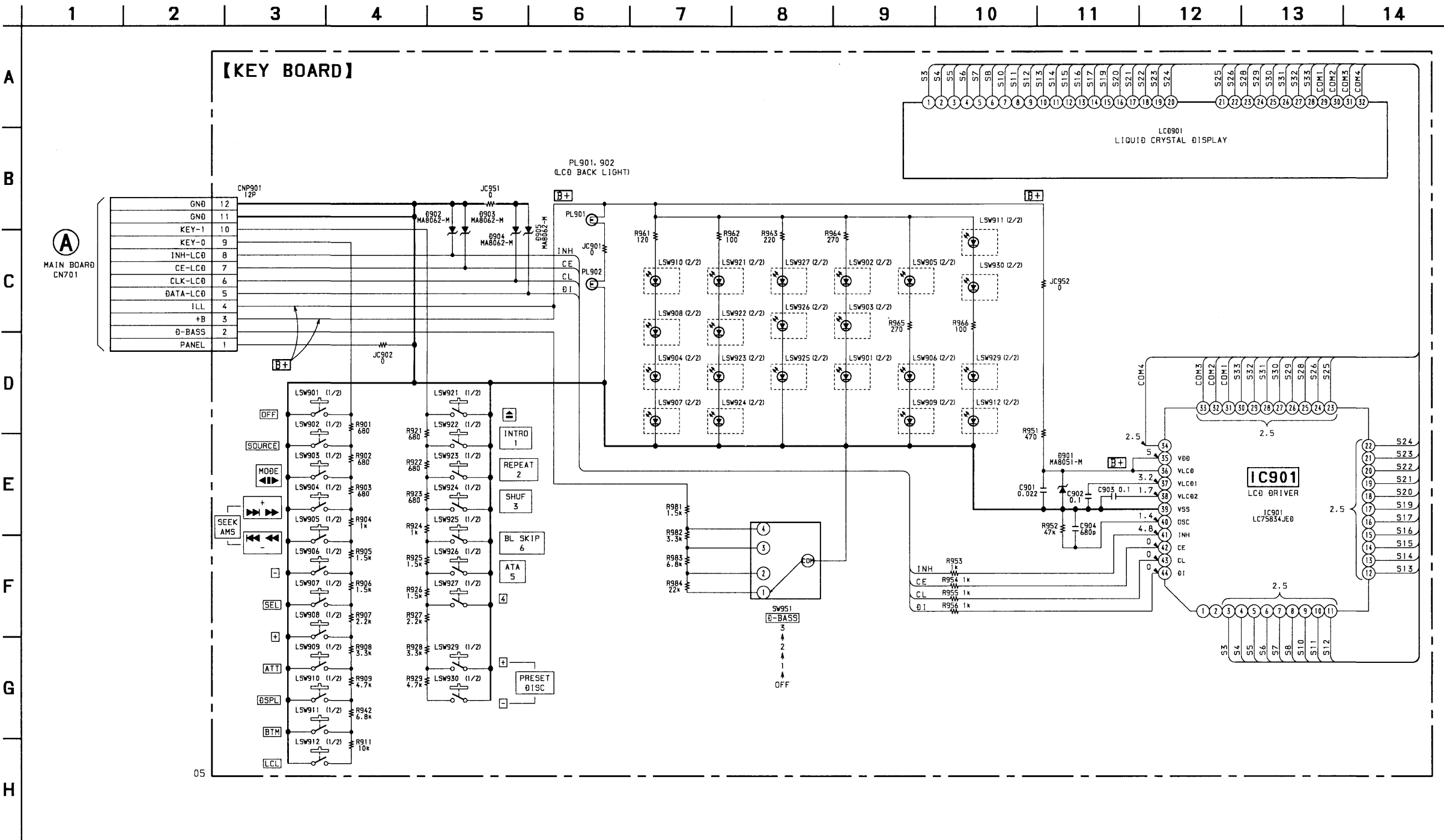
Ref. No.	Location
D901	E-7
D902	F-10
D903	F-10
D904	F-10
D905	F-10
IC901	E-6

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
Parts face side: Parts on the parts face side seen from (Component Side) the parts face are indicated.

6-5. SCHEMATIC DIAGRAM – PANEL Section –



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : μpF 50 WV 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.
- : panel designation.
- ⊕ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.