

STR-D715/D915

SERVICE MANUAL

US Model
Canadian Model
STR-D715/D915
Australian Model
STR-D915



Photo : STR-D915

SPECIFICATIONS

Audio Power Specifications

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 8-ohm load, both channels driven, from 20 - 20,000 Hz, rated 110 watts (STR-D915) or 100 watts (STR-D715) per channel minimum RMS power, with no more than 0.3 % total harmonic distortion from 250 milliwatts to rated output. (U.S. A. model only)

Other Specifications

Amplifier section

Continuous RMS power output (8 ohms, at 20 Hz - 20 kHz less than 0.3% (US, Canadian model), 0.7% (Australian model)

STR-D915: 118 W + 118 W

(US, Canadian model)

STR-D915: 110W + 110W (Australian model)

STR-D715: 110 W + 110 W

Surround mode

	Surround mode (8ohms at 1 kHz, THD 0.8 %)	
	STR-D915	STR-D715
FRONT	100 W/ch	80 W/ch
CENTER*	100 W	80 W
REAR	25 W	25 W

* (only in the DOLBY SUR and THEATER modes)

Dynamic power output (US, Canadian model)

STR-D915: 160 W + 160 W (8 ohms)

225 W + 225 W (4 ohms)

STR-D715: 155 W + 155 W (8 ohms)

220 W + 220 W (4 ohms)

Harmonic distortion at rated output (US, Canadian model)

Less than 0.3 %

Frequency response

PHONO: RIAA equalization curve

±0.5 dB

CD, DAT/MD, TAPE MONITOR, TV, LD,

VIDEO 1, 2, 3*, TAPE MONITOR, VIDEO 1, 2, 3*: 10 Hz - 50 kHz, ±1 dB

* STR-D915 only

FM tuner section

Tuning range 87.5 - 108.0 MHz
Antenna terminals 75 ohms, unbalanced
Sensitivity (at 50 dB): 18.3 dBf, 4.5 μV (mono)
38.3 dBf, 45 μV (stereo)

Usable sensitivity 11.2 dBf, 2 μV (IHF)
S/N Mono: 76 dB
Stereo: 70 dB

Harmonic distortion at 1 kHz

Mono: 0.3 %

Stereo: 0.5 %

Separation 45 dB at 1 kHz

Frequency response 30 Hz - 15 kHz, -0.5 dB

Selectivity 60 dB at 400 kHz

AM tuner section

Tuning range 530 - 1710 kHz (with 10 kHz interval*)

(US, Canadian model) 531 - 1710 kHz (with 9 kHz interval)

(Australian model) 531-1602kHz

Antenna

Loop antenna

Usable sensitivity 50 dB/m (at 1,000 kHz or 999 kHz)

S/N 54 dB (at 50 mV/m)

Harmonic distortion 0.5% (50 mV/m, 400 Hz)

Selectivity 35 dB (9 kHz), 40 dB (10 kHz)

* You can change the AM tuning interval to 9 kHz. After tuning in any AM station in any AM station, turn off the power of receiver once. While holding down the TUNING + button, press the POWER switch. When you change the interval, all the preset stations will be erased. To reset the interval, repeat the same procedure. (US, Canadian model)

Video section

Inputs STR-D915: VIDEO 1,2,3:

1 Vp-p 75 ohms

STR-D715: VIDEO 1,2:

1 Vp-p 75 ohms

Output VIDEO 1, 2, MONITOR:

1 Vp-p 75 ohms

General

System

Tuner section: PLL quartz-locked

digital synthesizer system

Low-noise NF type equalizer

Power amplifier section: Pure-

complimentary SEPP

Power requirements 120 V AC, 60 Hz (US, Canadian model)

240V AC, 50Hz (Australian model)

Power consumption (in standby condition: SW)

STR-D915: USA model: 210 W

Canada model: 305 VA

Australian model: 220W

STR-D715: USA model: 195 W

Canada model: 280 VA

AC outlets Two switched, total 120 W

(US, Canadian model)

One switched, 100W

(Australian model)

Dimensions 430 x 148 x 355 mm

(17 x 5 7/8 x 14 inches)

Mass STR-D915: 10.0 kg (22 lb 1 oz)

STR-D715: 9.7 kg (22 lb 7 oz)

Supplied accessories FM wire antenna (1)

AM loop antenna (1)

Remote commander (1)

Sony Batteries SUM-3(NS) (2)

Design and specifications are subject to change without notice.

Inputs

	Sensitivity	Impedance	S/N Short A Net/78 IHF A Net
PHONO (MM)	2.5 mV	50 kilohms	75 dB/75 dB
CD	300 mV	50 kilohms	82 dB/82 dB
DAT/MD, TV, LD, VIDEO 1, 2, 3*, TAPE MONITOR	250 mV	50 kilohms	82 dB/82 dB

* STR-D915 only

Outputs

REC OUT VIDEO 1, 2 (AUDIO) OUT	Voltage 250 mV Impedance 10 kilohms
HEADPHONES	Accepts low and high impedance headphones

MUTING -20 dB

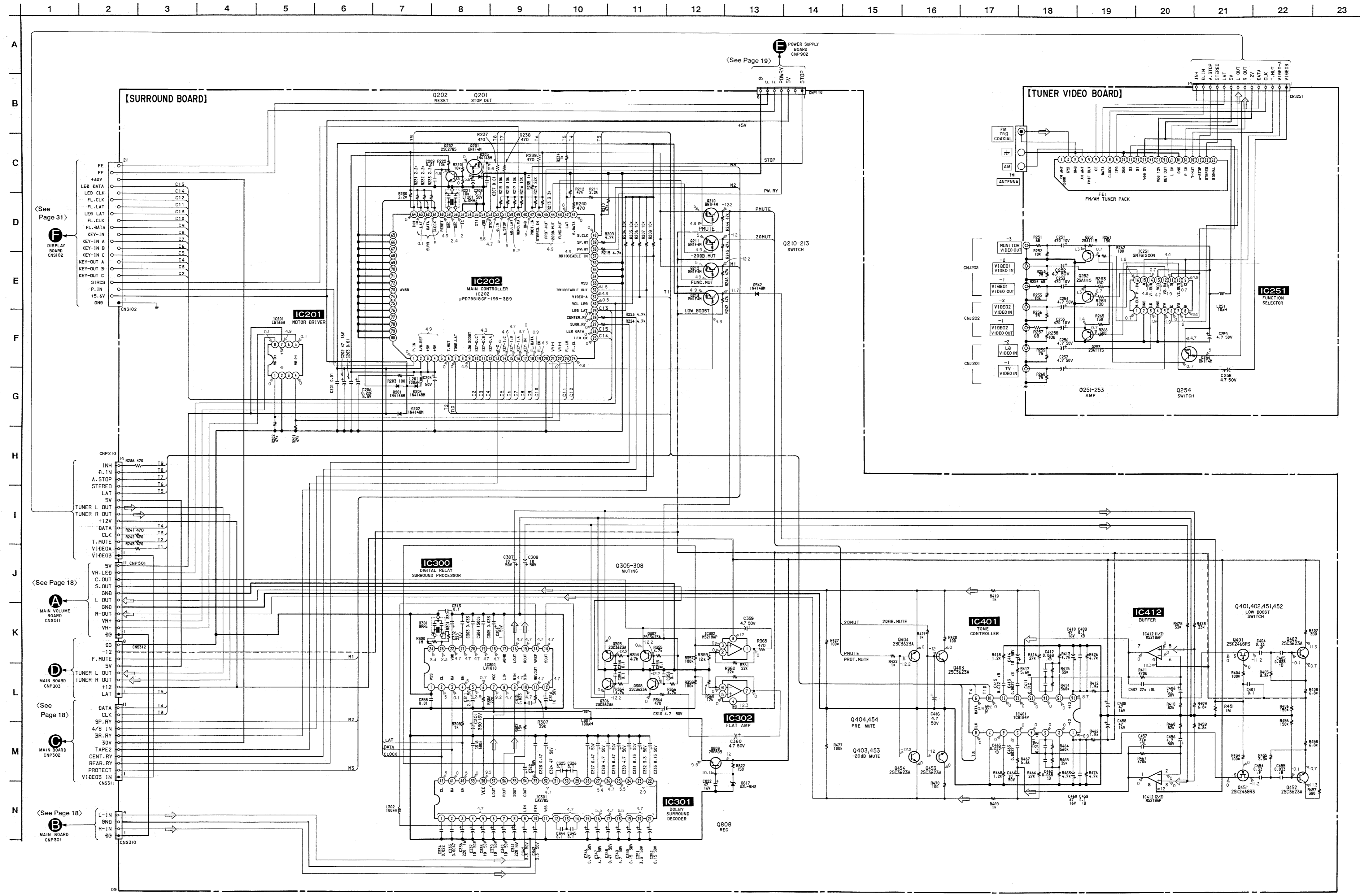
LOW BOOST +10 dB at 70 Hz

TONE ±8 dB at 100 Hz and 10 kHz

FM STEREO FM-AM RECEIVER
SONY



3-4. SCHEMATIC DIAGRAM — SURROUND SECTION —
• See page 34 for IC Pin Functions. (IC202)



(See Page 31)

DISPLAY BOARD CNS102

(See Page 18)

MAIN VOLUME BOARD CNS11

(See Page 18)

MAIN BOARD CNS101

(See Page 18)

MAIN BOARD CNS10

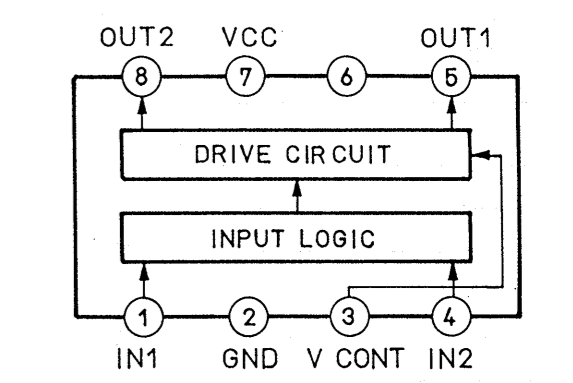
Note:
• All capacitors are in μF unless otherwise noted. pF ; μF 50WV or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and 1/4W or less unless otherwise specified.
• Δ : internal component.
• \square : panel designation.

Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

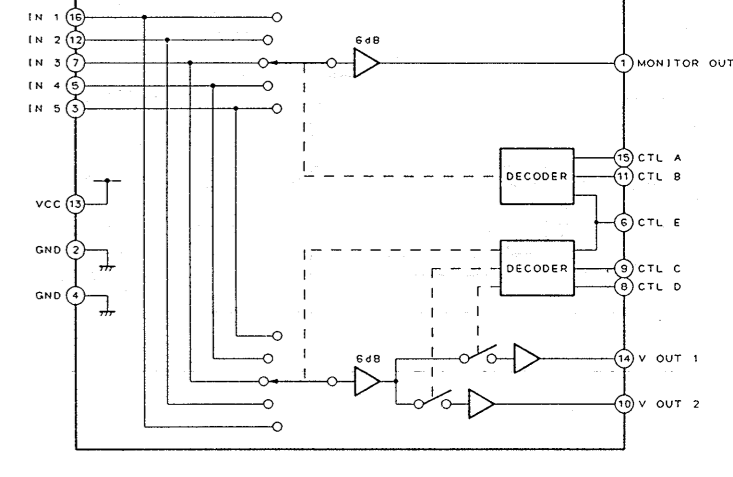
Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

—: B+ Line
- - - - -: B- Line
Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark: FM
Voltage variations may be noted due to normal production tolerances.
Signal path.
⇨: FM

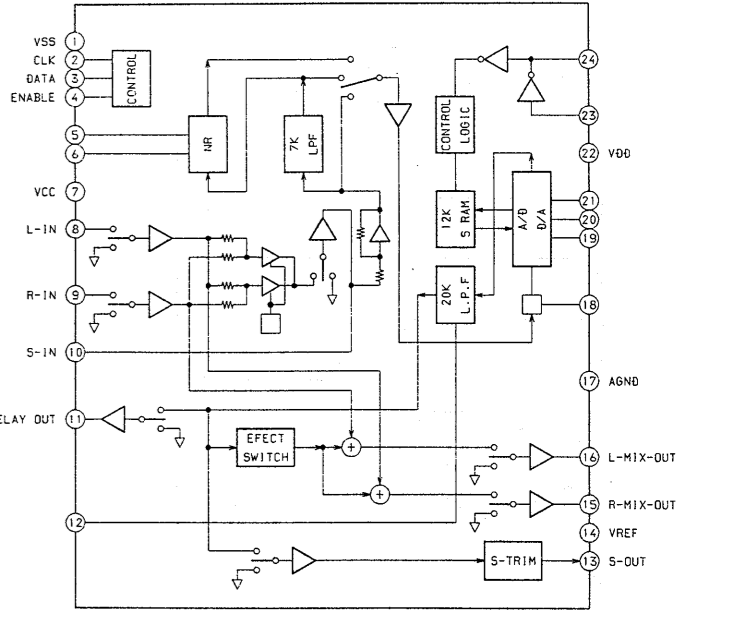
• IC Block Diagrams.
IC201 LB1639



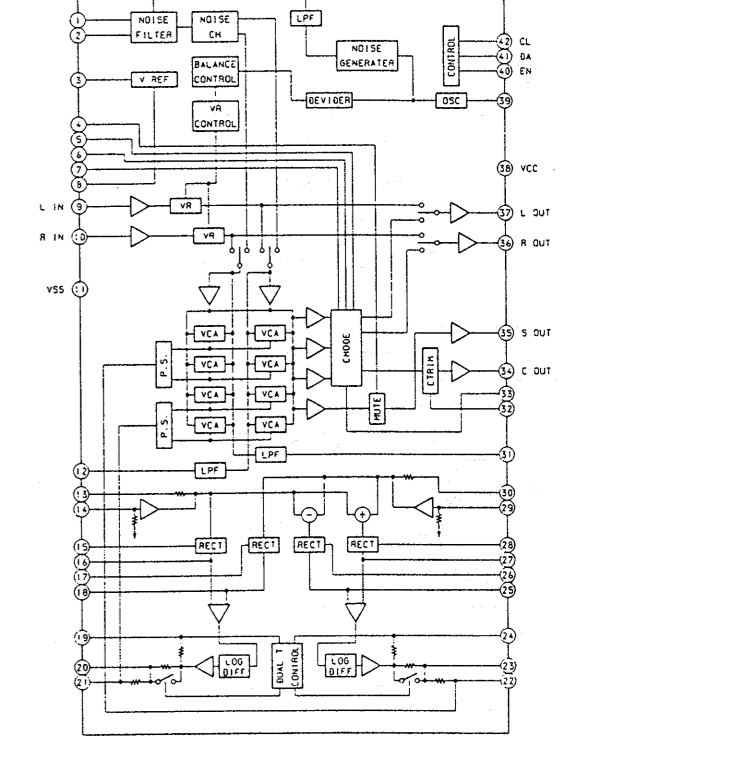
IC251 SN761200N



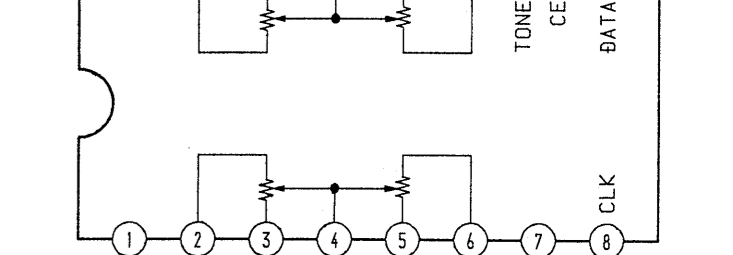
IC300 LV1010



IC301 LA2785



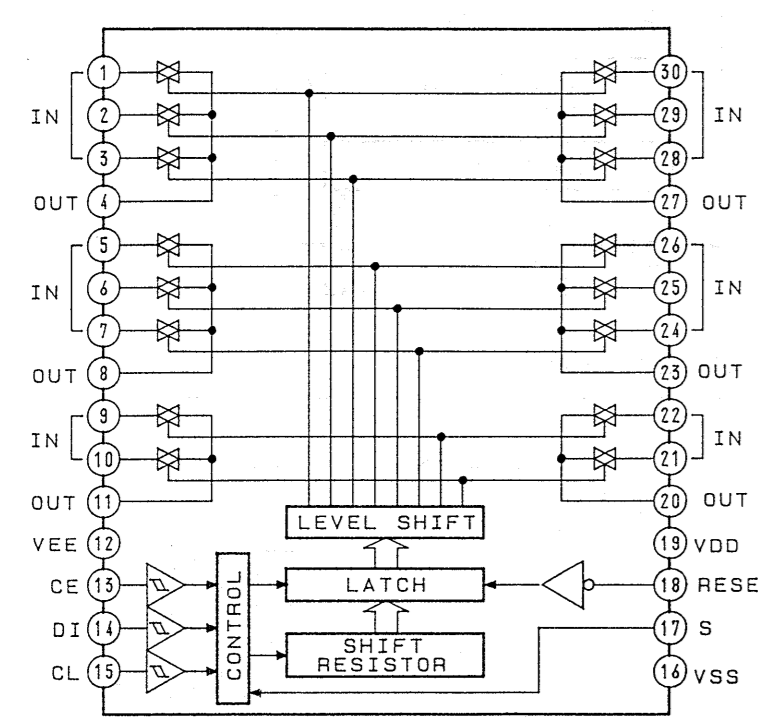
IC401 TC9184P



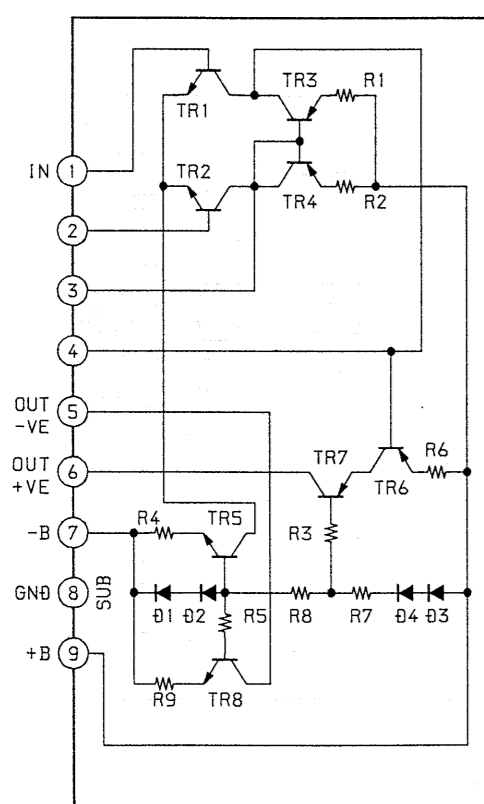
3-5. SCHEMATIC DIAGRAM — MAIN SECTION —

• IC Block Diagrams.

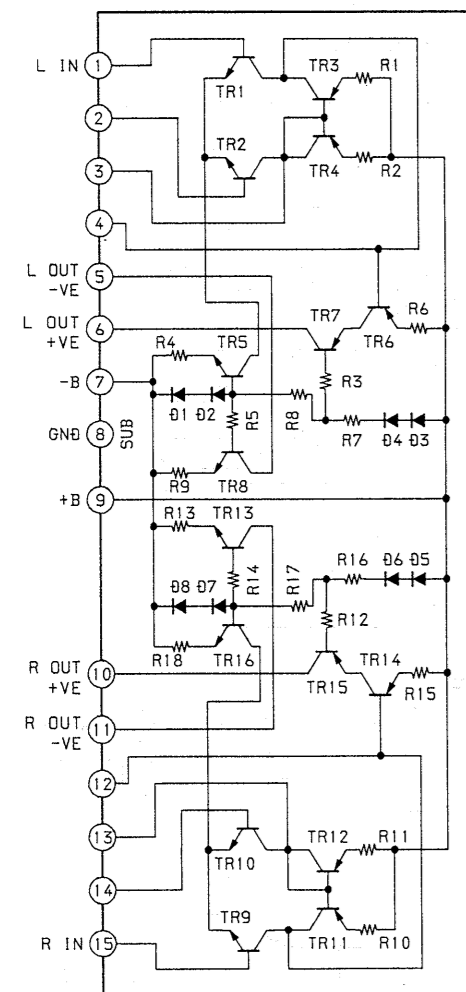
IC502, 503 LC7822



IC601 STK350-130



IC701 STK3102-3



Note:

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- All resistors are in Ω and 1/4W or less unless otherwise specified.
- Δ : internal component.
- \square : nonflammable resistor.
- \square : panel designation.

Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

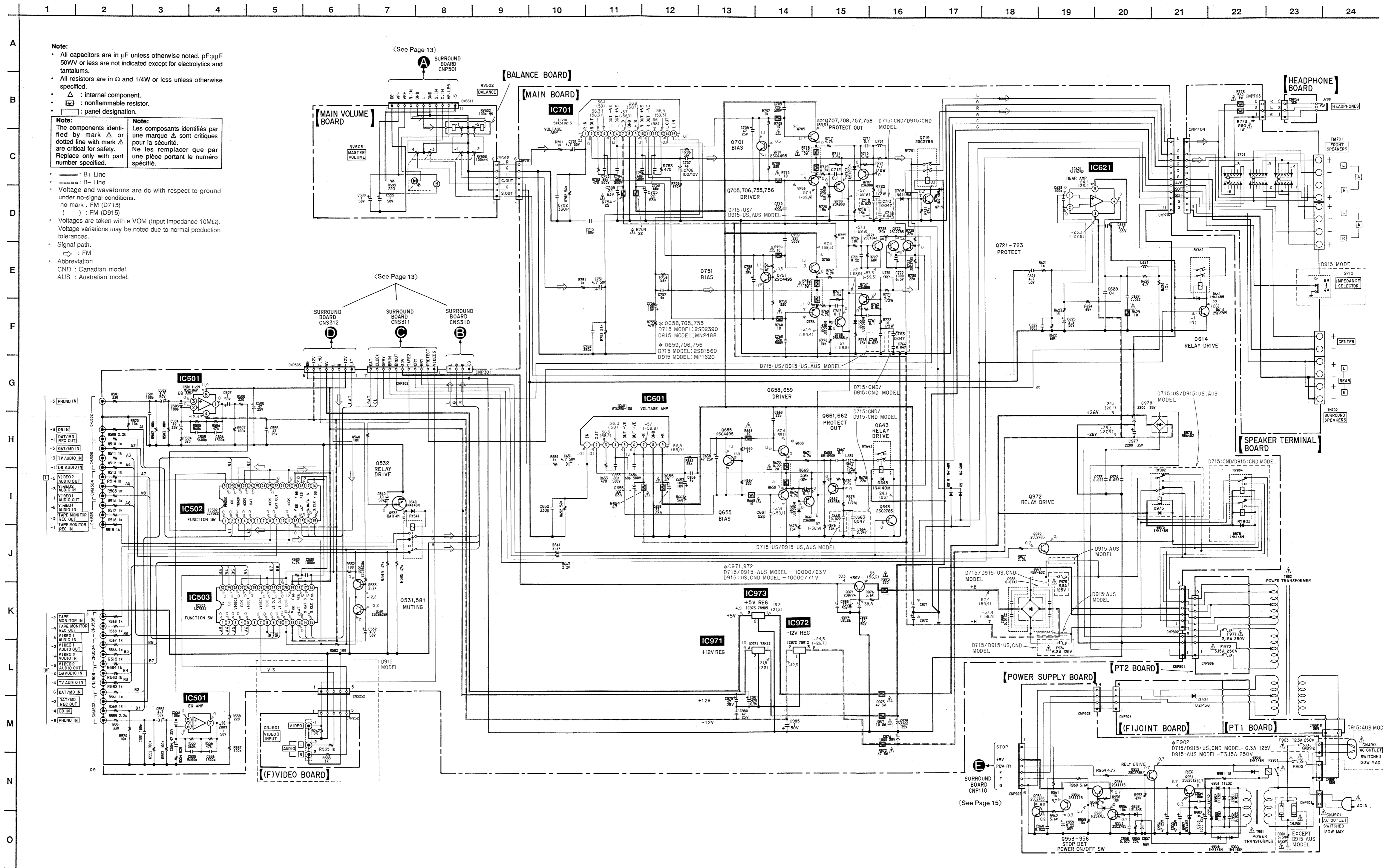
-----: B+ Line
=====: B- Line

Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark: FM (D715)
(): FM (D915)

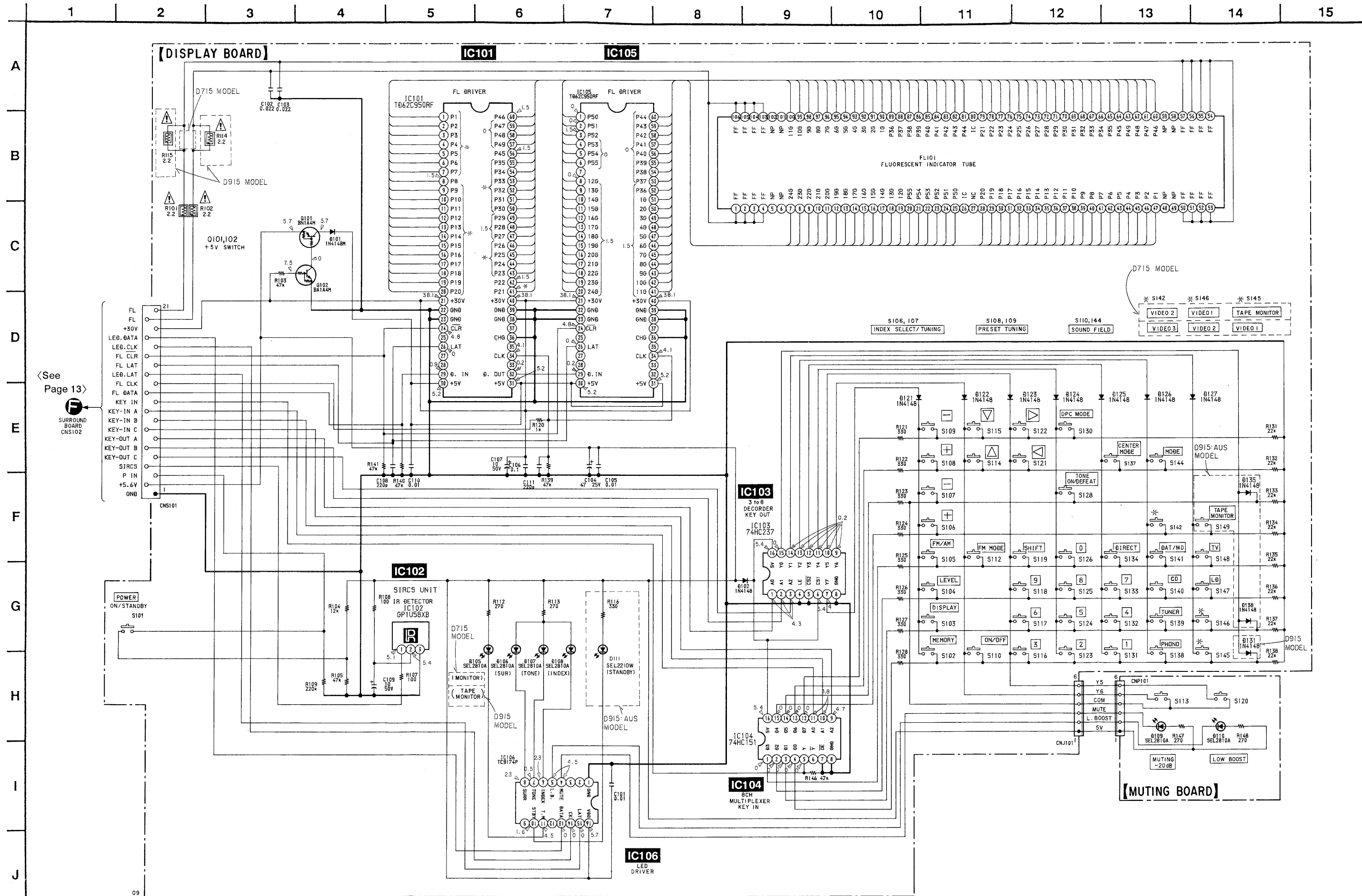
Voltagés are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.

Signal path:
→: FM

Abbreviation
CND: Canadian model.
AUS: Australian model.

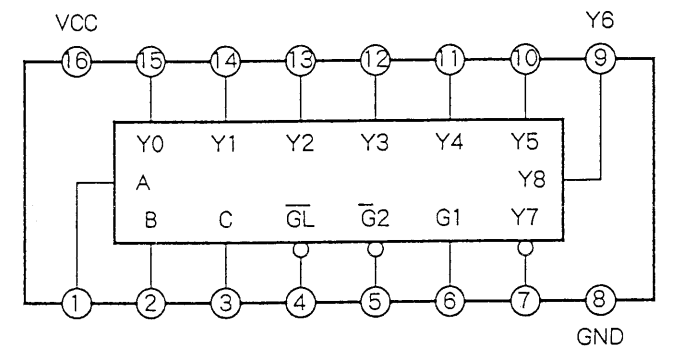


3-8. SCHEMATIC DIAGRAM — DISPLAY SECTION —
 • See page 36 for IC Pin Functions. (IC106)

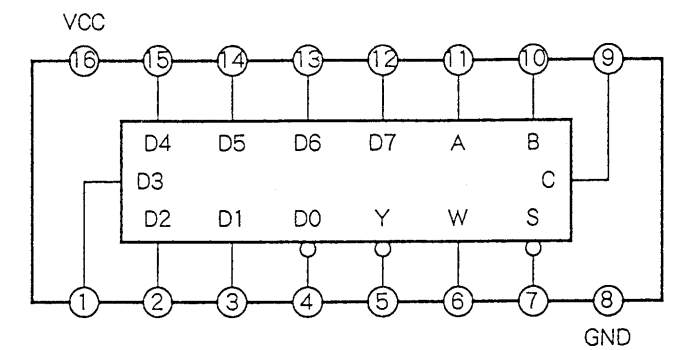


• IC Block Diagrams.

IC103 74HC237



IC104 74HC151



Note:

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- All resistors are in Ω and 1/4W or less unless otherwise specified.
- \square : nonflammable resistor.
- \square : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- \square : B+ Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : FM
- * : can not be measured.
- Voltages are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Abbreviation: AUS : Australian model.