

# STR-DE445/DE545/SE501

## SERVICE MANUAL



Photo: STR-DE445

*US Model*  
STR-DE445/DE545/SE501  
*Canadian Model*  
*AEP Model*  
*UK Model*  
STR-DE445/DE545  
*E Model*  
*Australian Model*  
*Chinese Model*  
*PX Model*  
STR-DE545

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### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 8  $\Omega$  loads, both channels driven, from  
20 – 20,000 Hz; rated 100<sup>W</sup> per channel  
minimum RMS power, with no more than  
0.09% total harmonic distortion from 250  
mW to rated output (US model only).

STR-DE445:  
a) 80 W

#### Amplifier section

Rated Power Output at Stereo mode

US model:  
(8  $\Omega$  20 Hz – 20 kHz, THD  
0.09 %)

EXCEPT US:  
(8  $\Omega$  1 kHz, THD 0.7 %)

STR-DE545/SE501:  
100 W + 100 W

STR-DE445:  
80 W + 80 W

Reference Power Output

(8 $\Omega$  at 1 kHz, THD 0.7 %)

STR-DE545/SE501:  
Front: 100 W + 100 W  
Center: 100 W  
Rear: 100 W + 100 W

STR-DE445:  
Front: 80 W + 80 W  
Center: 80 W  
Rear: 80 W + 80 W

Frequency response

CD, MD/TAPE, DVD/LD, TV/  
SAT, VIDEO, AUX:  
10 Hz – 50 kHz +0.5/–2 dB  
(with sound field, tone, and  
bass boost bypassed)

Inputs (Analog) 5.1 CH INPUT, CD, DVD/LD,  
MD/TAPE, TV/SAT, VIDEO,  
AUX:  
Sensitivity: 250 mV  
Impedance: 50 k $\Omega$   
S/N<sup>b)</sup>: 96 dB (A, 250 mV<sup>c)</sup>)

b) Input short.

c) Weighted network, input level.

Inputs (Digital) DVD/LD (coaxial):  
Sensitivity: —  
Impedance: 75  $\Omega$   
S/N: 100 dB (A, 20 kHz LPF)  
DVD/LD, TV/SAT\* (Optical):  
Sensitivity: —  
Impedance: —  
S/N: 100 dB (A, 20 kHz LPF)

\*) STR-DE545 and STR-SE501 only.

Outputs MD/TAPE, (REC OUT); VIDEO  
(AUDIO OUT):  
Voltage: 250 mV,  
Impedance: 10 k $\Omega$   
SUB WOOFER:  
Voltage: 2 V  
Impedance: 1 k $\Omega$   
PHONES:  
Accepts low- and high-  
impedance headphones

BASS BOOST +6 dB at 70 Hz

TONE  $\pm 6$  dB at 100 Hz and 10 kHz

Sampling Frequency  
48 kHz

#### FM tuner section

Tuning range 87.5 – 108.0 MHz

Antenna terminals 75  $\Omega$ , unbalanced

Sensitivity Mono: 18.3 dBf, 2.2  $\mu$ V/75  $\Omega$   
Stereo: 38.3 dBf, 22.5  $\mu$ V/75  $\Omega$

Usable sensitivity 11.2 dBf, 1  $\mu$ V/75  $\Omega$

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/–2 dB

Selectivity 60 dB at 400 kHz

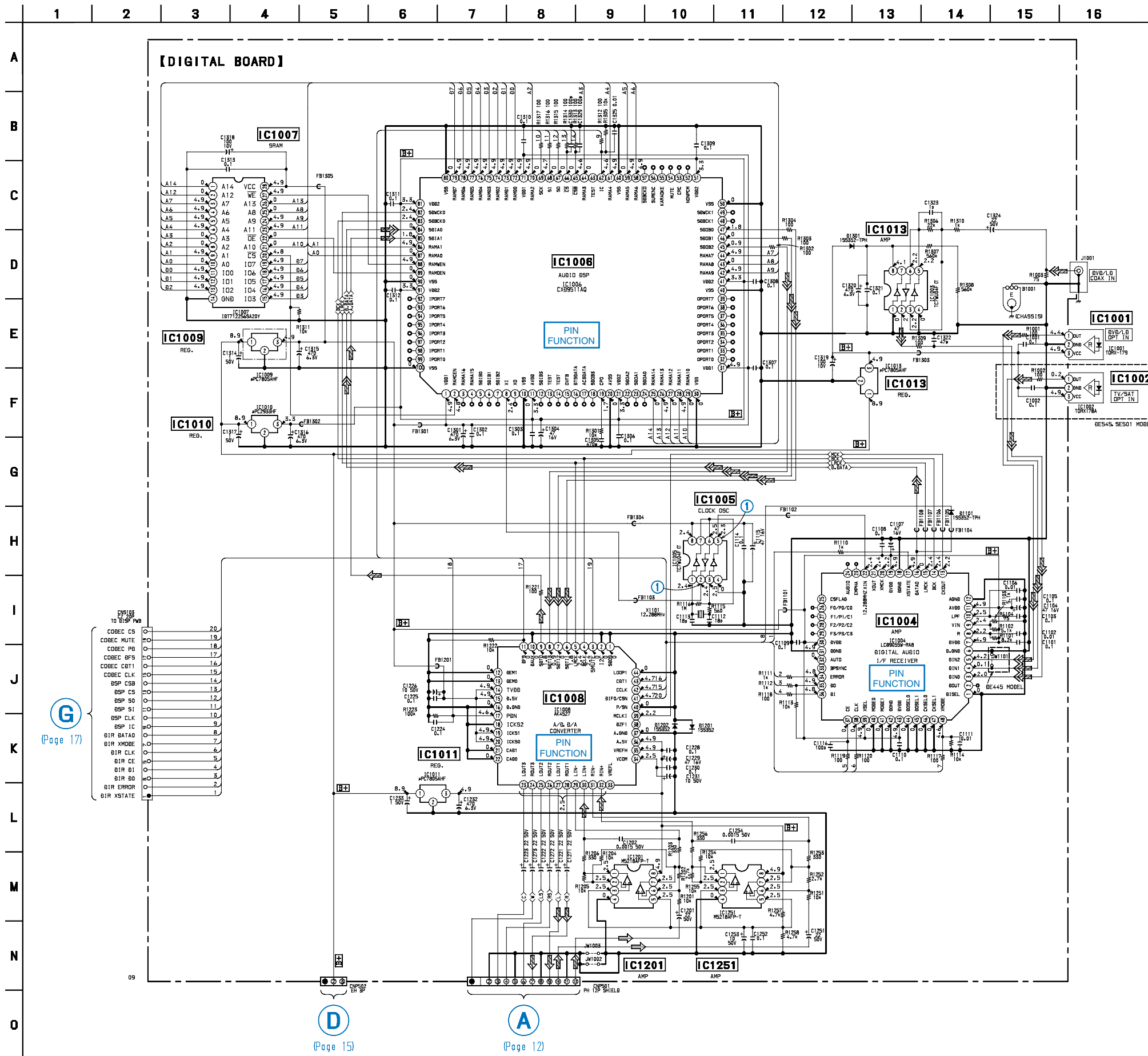
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## FM STEREO FM-AM RECEIVER

# SONY®

3-4. SCHEMATIC DIAGRAM — DIGITAL SECTION —

- See page 7 for Waveforms.
- See page 21 for IC Pin Functions.



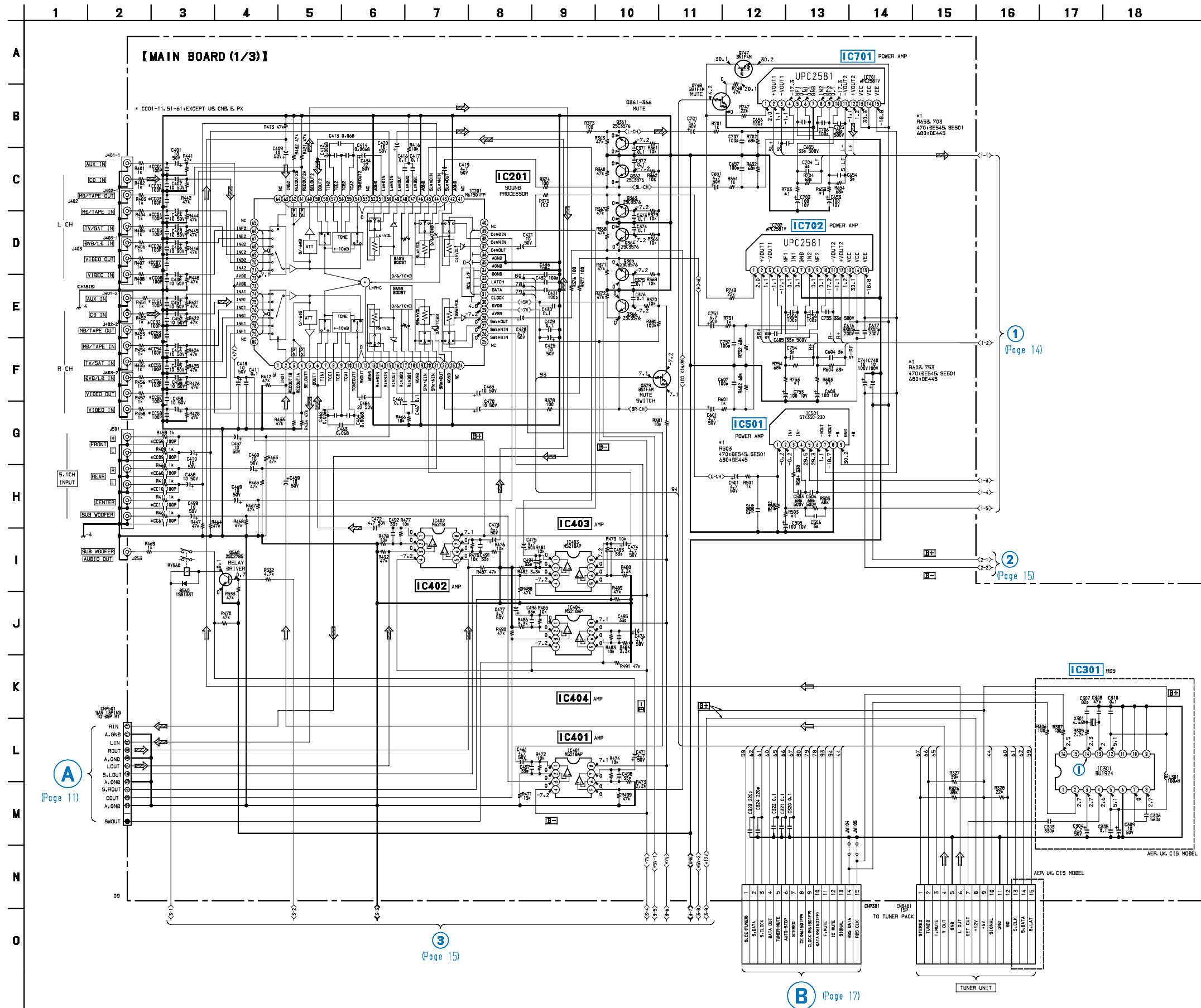
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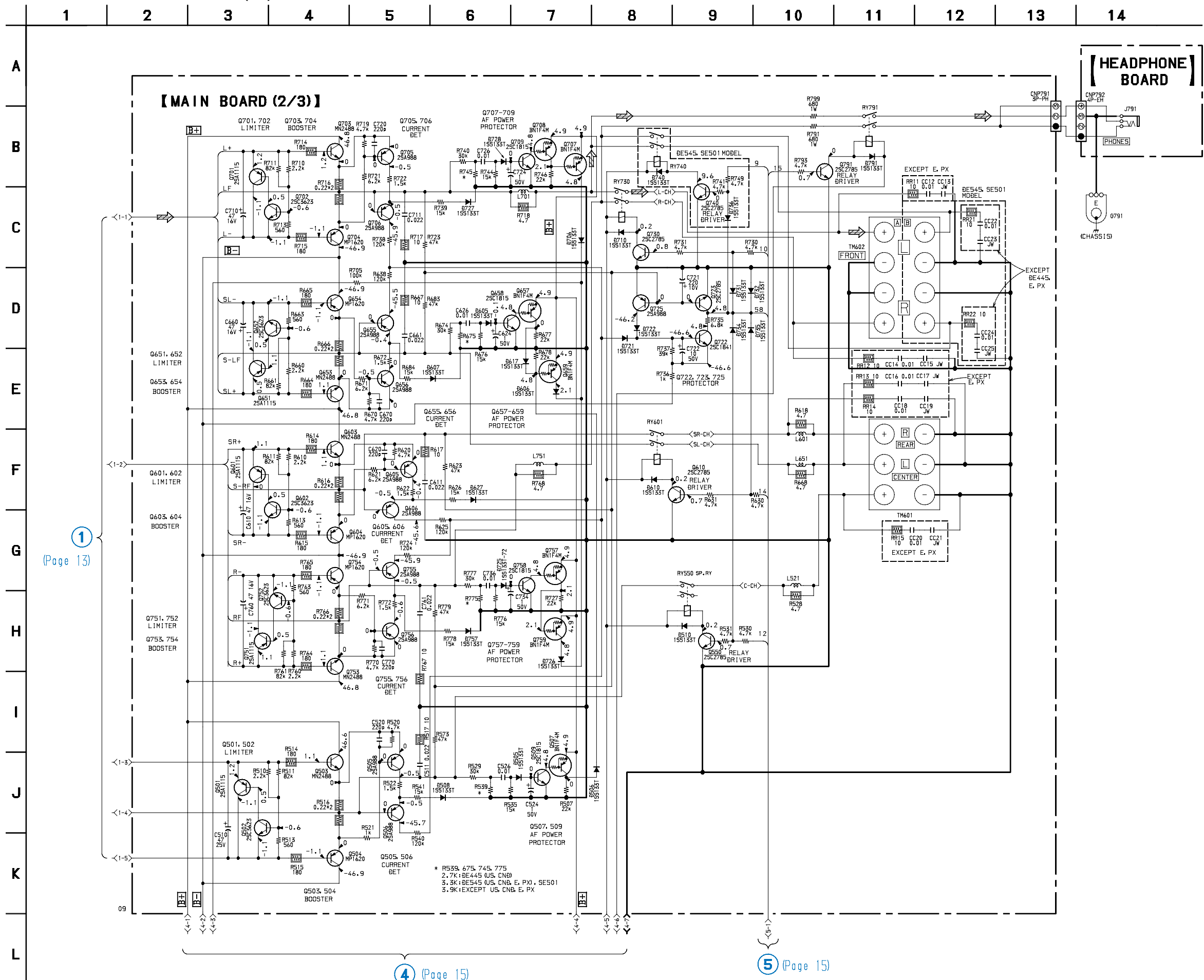
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3-6. SCHEMATIC DIAGRAM — MAIN (1/3) SECTION —

- See page 7 for Waveforms.
- See page 28 for IC Block Diagrams.



3-7. SCHEMATIC DIAGRAM — MAIN (2/3) SECTION —

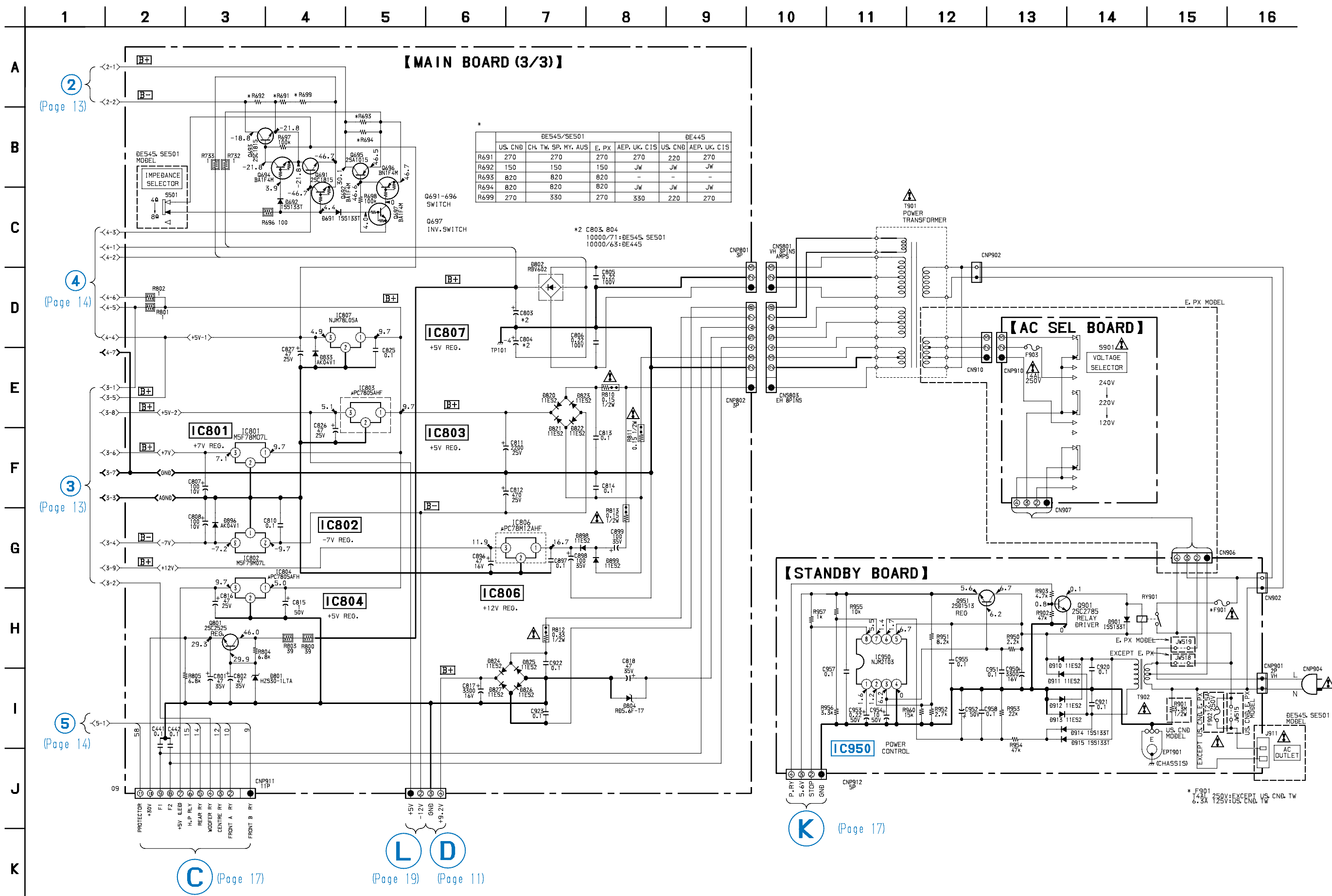


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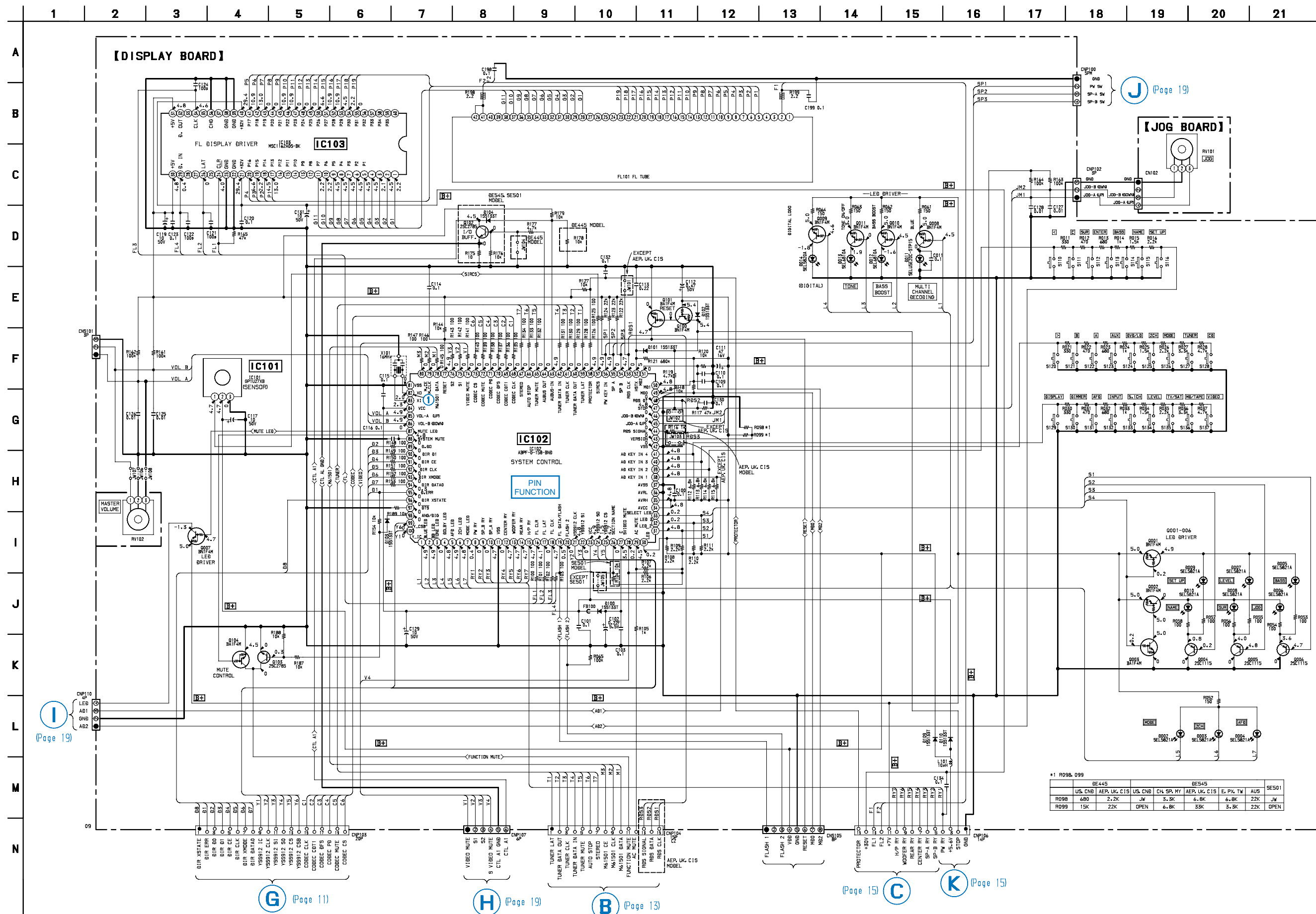
3-8. SCHEMATIC DIAGRAM — MAIN (3/3) SECTION —





3-10. SCHEMATIC DIAGRAM — DISPLAY SECTION —

- See page 7 for Waveforms.
- See page 26 for IC Pin Functions.



3-12. SCHEMATIC DIAGRAM — VIDEO/KEY SECTION —  
 • See page 29 for IC Block Diagrams.

