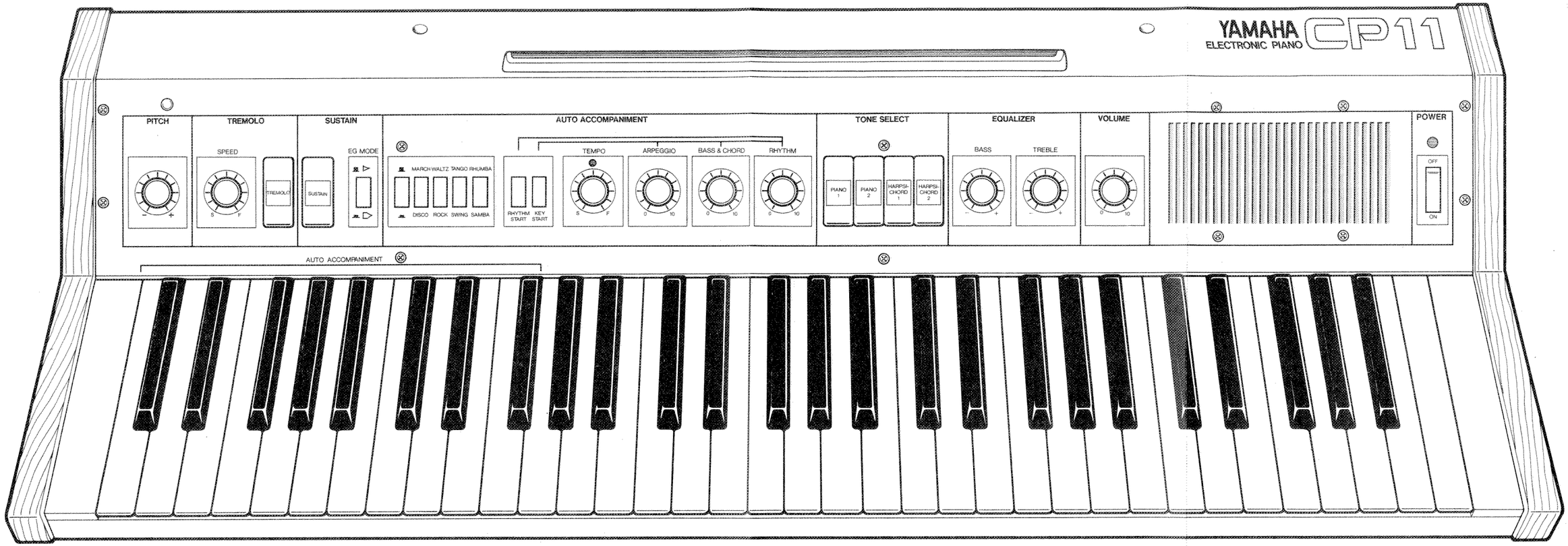
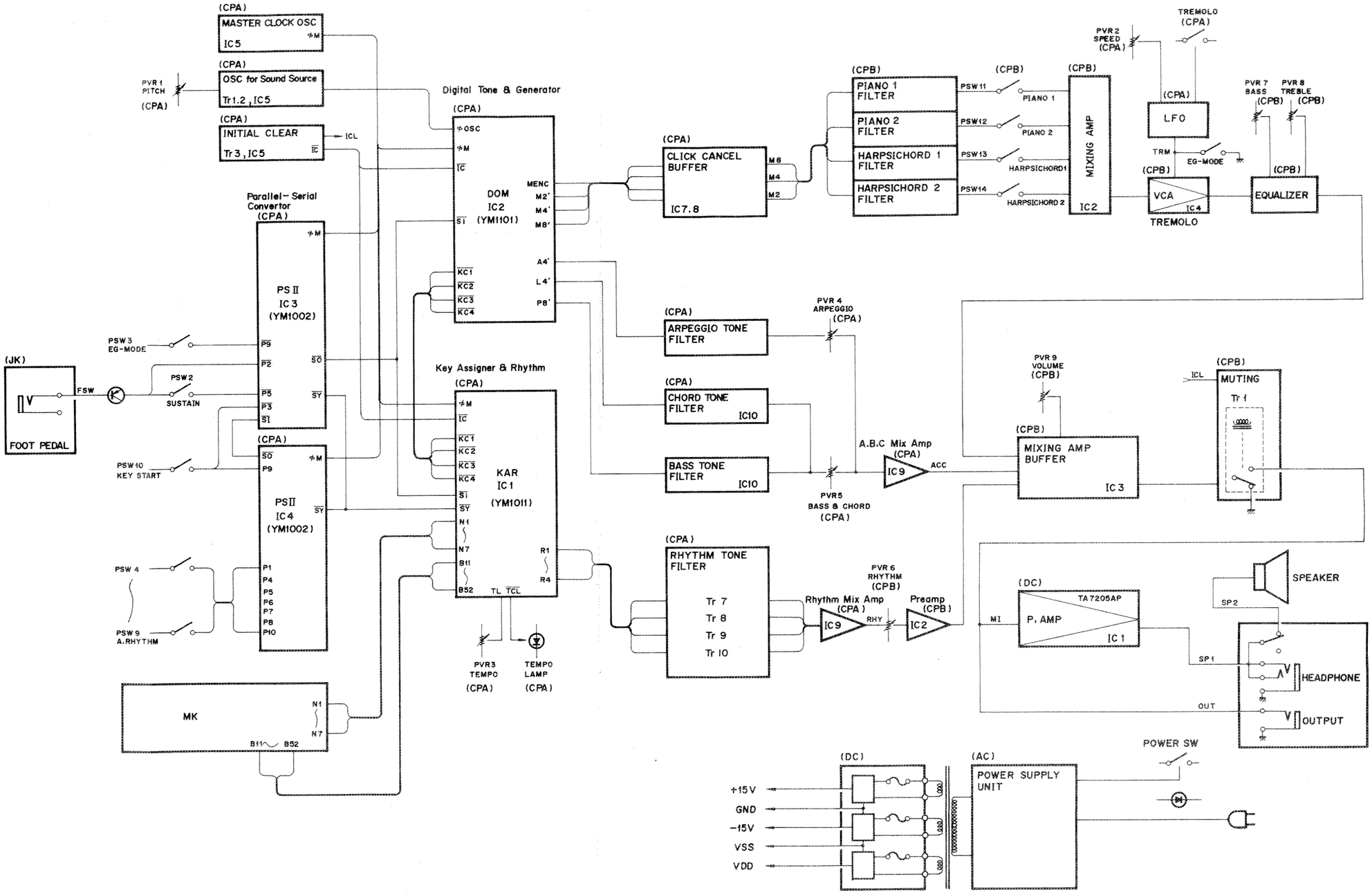
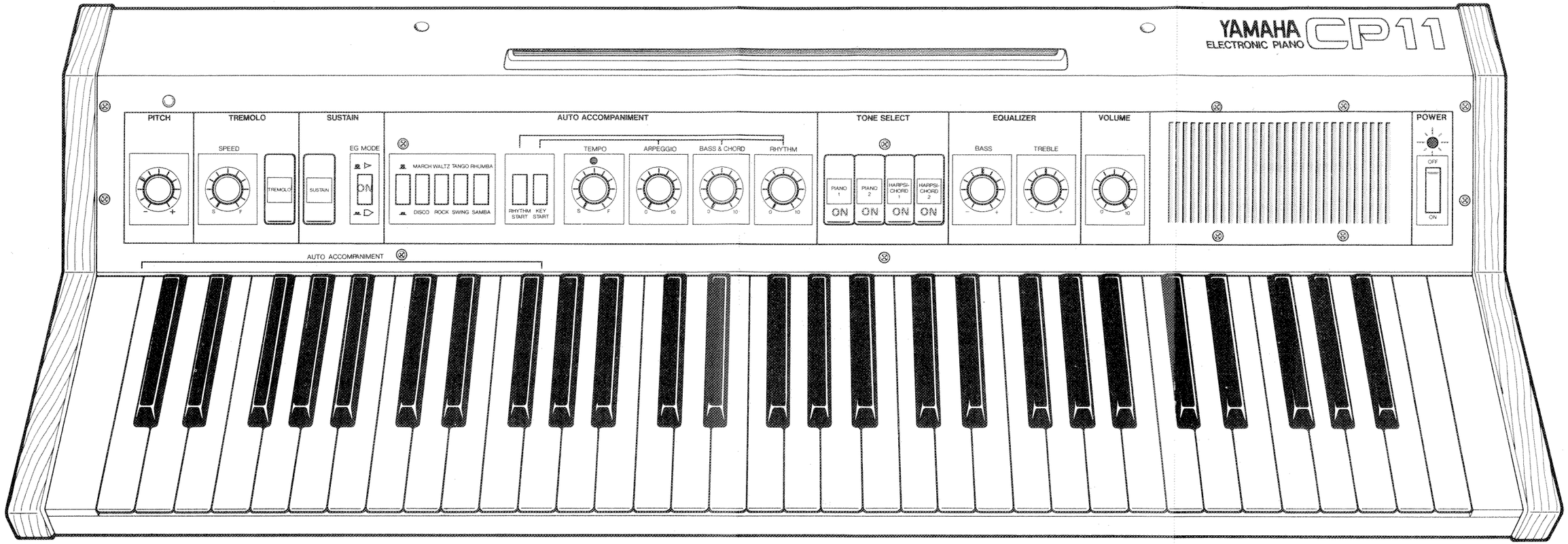
PANEL LAYOUT



BLOCK DIAGRAM



PANEL SETTINGS



BLOCK	CONTROL	SETTING
PITCH		"10 o'clock" position
TREMOLO	SPEED	S
	TREMOLO	OFF
SUSTAIN	SUSTAIN	OFF
	EG MODE	ON (▣)
AUTO ACCOMPANIMENT	MARCH · WALTZ · TANGO · RHUMBA DISCO · ROCK · SWING · SAMBA	OFF (▣)
	RHYTHM START	OFF
	KEY START	
	TEMPO	S
	ARPEGGIO	0
	BASS & CHORD	
	RHYTHM	
TONE SELECT	PIANO 1	ON
	PIANO 2	
	HARPSICHORD 1	
	HARPSICHORD 2	
EQUALIZER	BASS	Middle
	TREBLE	
VOLUME		Maximum

CHECKS AND ADJUSTMENT PROCEDURES

Before tuning the instrument or checking circuits, set the instrument in the state described in PANEL SETTINGS. Then you should select a suitable setting according to the requirements of each item that is being checked or adjusted.

- **Number of sounds developed**
  During AUTO ACCOMPANIMENT, four sounds develop with the upper keyboard (G2 ~ G6) and, with the lower keyboard (C1 ~ F 2), one arpeggio sound and up to four chord sounds.

- **Measuring instruments used**
  Oscilloscope
  Level meter (12.47 kHz) with filter
  Frequency counter
  *If no testpoint is designated, connect a 10 kohm resistor to the OUTPUT terminal and measure output via the resistor.

1. Tuning

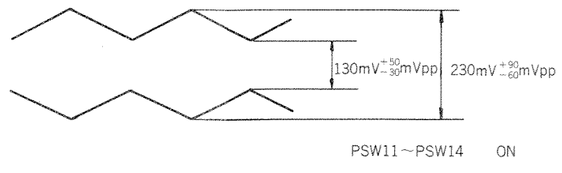
- Set PITCH (PVR1) at its "10 o'clock" position and depress key A3. Adjust L1 OSC coil (500μH) of the CPA board by turning its core so that the output frequency become 440Hz ± 0.5Hz.
  *The output frequency should be 454Hz ± 3Hz at the minimum position of PVR1.

2. Circuit checks

- **Output level**
  Output level should be –12dB ± 3dB when any of seven white keys B3 ~ C3 is depressed.

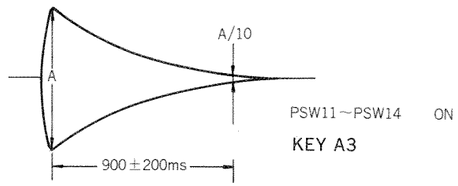
- **Noise level**
  When BASS (PVR7) and TREBLE (PVR8) are at their middle position, noise level should be below –70dB independent of the settings of the other controls and switches.
  *Noise level should not rise above –60dB when PVR7 and PVR8 are moved.

- **Tremolo**
  When TREMOLO (PSW1) is on and key A3 is depressed, tremolo effect should be produced as shown below.



CHECKS AND ADJUSTMENT PROCEDURES

- **EG mode**
  Sounds should decay when EG MODE (PSW3) is OFF (▷) and be sustained when it is ON (▷). The maximum amplitude should be approximately twice as large as the amplitude of sustained sounds.



- **Rhythm**
  When RHYTHM (PVR6) is at its maximum position, the amplitude of bass drum signal (first beat of MARCH) should be 12V ± 0.3Vpp. Rhythm output should not appear at the minimum position of PVR6.

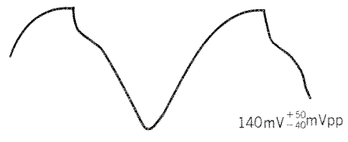
- **Arpeggio**
  When ARPEGGIO (PVR4) is at its maximum position, the maximum amplitude of arpeggio sounds should be 220mV ± 50mVpp. No arpeggio sounds should be produced at the minimum position of PVR4.

- **Bass**
  When BASS & CHORD (PVR5) is at its maximum position, the maximum amplitude of bass sounds should be 0.8V ± 0.2Vpp. No bass sounds should be produced at the minimum position of PVR5.

3. Waveform and level of each voice

●**PIANO 1** (PSW11)

●**PIANO 2** (PSW12)



●**HARPSICHORD 1** (PSW13)

●**HARPSICHORD 2** (PSW14)