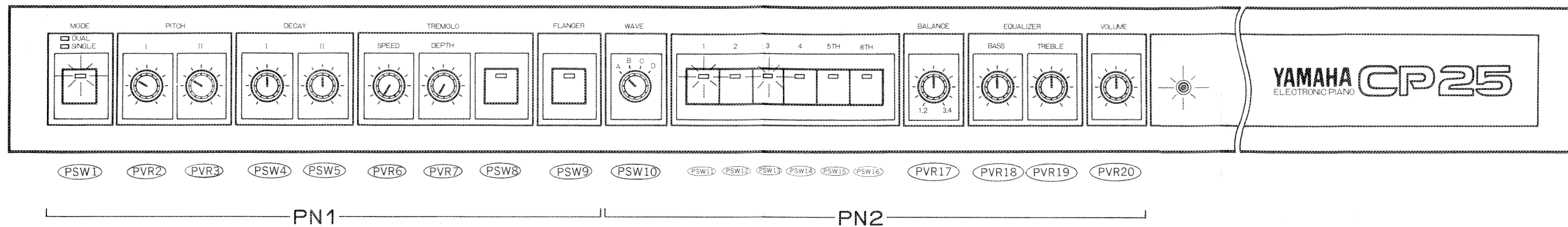


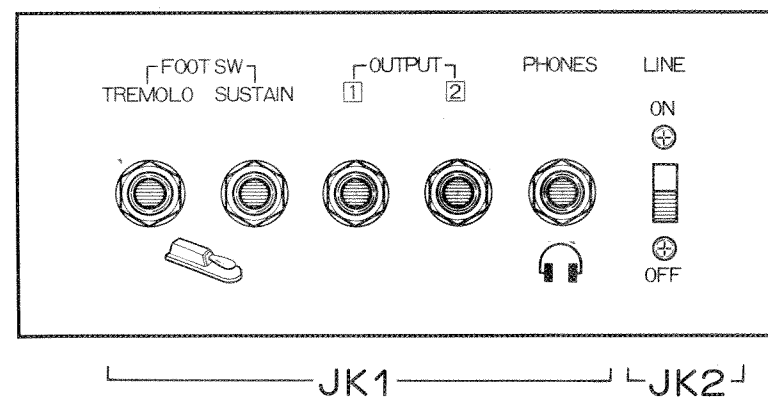
PANEL LAYOUT

FRONT PANEL

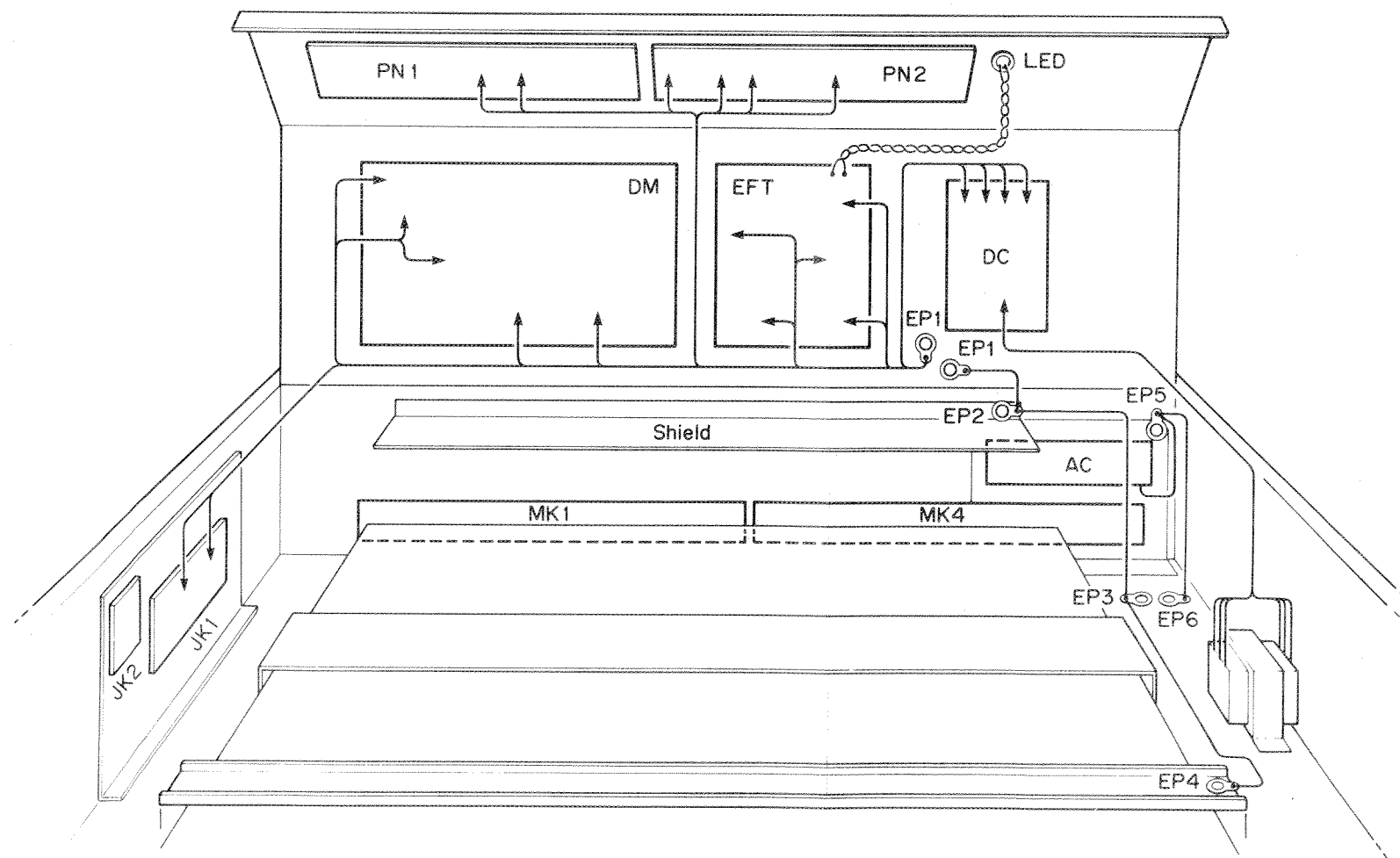
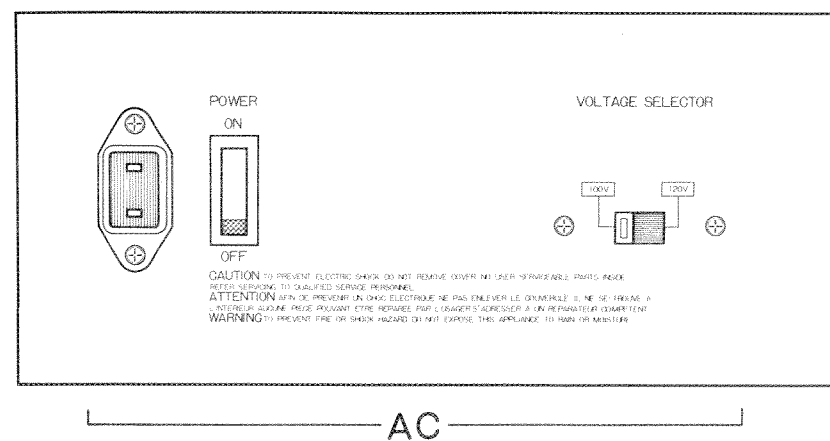


UNIT LAYOUT

LEFT SIDE PANEL

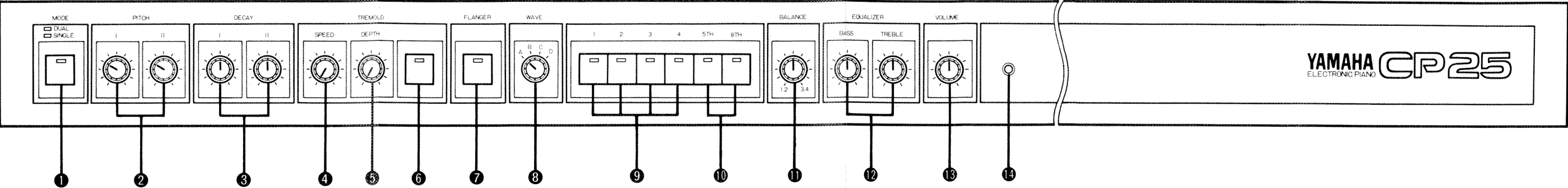


REAR PANEL



PART NAMES AND FUNCTIONS

CONTROL PANEL (FRONT PANEL)

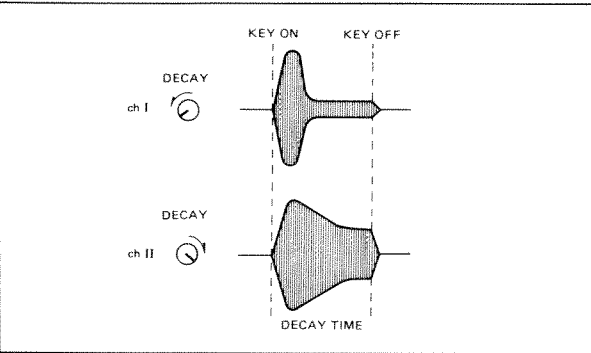


1 MODE
The **MODE** switch (**DUAL/SINGLE**) determines the maximum number of simultaneous output notes and the number of sound channels used.
DUAL: In the **DUAL** mode, 2 sound channels are operative with a maximum of 8 simultaneous output notes.
SINGLE: In the **SINGLE** mode, 1 sound channel is operative with a maximum of 16 simultaneous output notes.

When the **MODE** switch indicator LED is lit, the **DUAL** mode is active, and when extinguished, the **SINGLE** mode is active. **MODE** alternates between **DUAL** and **SINGLE** each time the **MODE** switch is pressed. When power to the instrument is initially turned on, the **DUAL** mode is automatically activated.

2 PITCH I, II
The **PITCH I** and **PITCH II** controls independently adjust the pitch of the CP25's sound channels I and II, respectively. Turning either of these controls to the right (clockwise) raises the pitch of the respective channel, while turning to the left (counterclockwise) lowers pitch. Setting channel I and channel II to different pitches produces a "detune" effect creating a fatter, honky-tonk piano type sound. Pitch control range is approximately from 436Hz to 453Hz. Setting the **PITCH** controls to approximately 10 o'clock provides 440Hz (A₃) tuning.
* When the **SINGLE** mode is active, the **PITCH II** control has no effect.

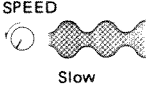
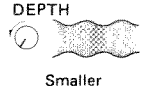
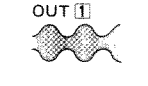
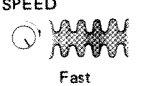
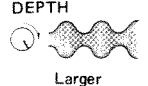
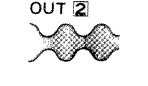
3 DECAY I, II
The **DECAY I** and **DECAY II** controls independently adjust the decay time of sound channels I and II, respectively. Turning either of these controls to the right (clockwise) lengthens the decay time of the respective channel, while turning to the left (counterclockwise) shortens decay time. The **DECAY** controls can each be set to eight different positions. Once the pitch, tone and balance of the two sound channels have been set, the **DECAY I** and **DECAY II** controls can be used to create a broad variety of decay time combinations providing extra sound control flexibility. By setting exceptionally long decay times it is possible to create sustained, organ-like tones.



* When the **SINGLE** mode is active, the **DECAY II** control has no effect.

4 TREMOLO SPEED
The tremolo effect produces periodic variations in the volume of the sound. Turning the **TREMOLO SPEED** control to the right (clockwise) increases the speed of the volume variation, while turning it to the left (counterclockwise) creates a slower tremolo sound. If the CP25's independent **OUT 1** and **OUT 2** outputs are connected to separate amplifier and speaker systems, the sound will seem to sweep back and forth between the two speakers at a rate determined by the **TREMOLO SPEED** control.

5 TREMOLO DEPTH
This control determines by how much the volume of the sound is varied by the tremolo effect. Turning the **TREMOLO DEPTH** control to the right (clockwise) produces a larger variation in volume, while turning it to the left (counterclockwise) produces a smaller (shallower) volume variation.

TREMOLO SPEED	TREMOLO DEPTH	TREMOLO OUTPUT
 Slow	 Smaller	 OUT 1
 Fast	 Larger	 OUT 2

6 TREMOLO SWITCH
This switch turns the tremolo effect on or off. Pressing this switch causes its LED indicator to light showing that the tremolo effect is on. Pressing it a second time turns the tremolo effect off (LED "off").
* Tremolo output from **OUT 1** and **2** is reverse phase. If both of the tremolo outputs from **OUT 1** and **OUT 2** are mixed with the monaural signal by using a mixer, the tremolo effect is not produced.

7 FLANGER SWITCH
The flanger effect produces a pleasant "swooshing" or "swirling" effect with long tones, and adds interesting tonal variation to staccato passages. Pressing the **FLANGER** switch causes its LED indicator to light showing that the flanger effect is on. Pressing it a second time turns the flanger effect off (LED "off").

8 WAVE
The **WAVE** selector selects the waveform shape of the channel I and channel II tone generators but not each independently. Four basic waveforms (**A**, **B**, **C** and **D**) can be selected, providing a broad range of subtle tonal variations.

- 9 FILTER SELECTORS**
These selectors permit application of four types of filtration to the waveform determined by the **WAVE** selector (1, 2, 3 or 4).
1. **FILTER SELECTOR 1** activates a low-pass filter thereby producing a round, warm sound.
2. **FILTER SELECTOR 2** activates a low-pass filter with a higher cutoff frequency than that of **FILTER SELECTOR 1**, thereby producing a somewhat harder sound.
3. **FILTER SELECTOR 3** activates a bandpass filter which produces a clear, well-defined sound.
4. **FILTER SELECTOR 4** activates a high-pass filter thereby producing a hard, bright sound.

* The tonal quality of sound can be changed not only by combining filter selectors 1 through 4 of channels I and II but also by adjusting the **DECAY** controls and selecting **A**, **B**, **C** or **D** on the **WAVE** control. The **DECAY** controls adjusted at the dual mode can cause an overall change to the sound and therefore they are helpful in creating sounds.

10 5TH, 8TH SELECTORS
These selectors raise the pitch of channel II by the designated interval with respect to channel I. Pressing the 5th selector causes the pitch of channel II to be an interval of perfect fifth higher than channel I. Pressing the 8th selector causes the pitch of channel II to be one octave higher than channel I. Pressing both the 5th and 8th selectors causes the pitch of channel II to be an interval of perfect 12th (an octave and a fifth) higher than channel I. (**DUAL MODE**)
* When the **SINGLE** mode is active, the above transpositions affect the overall sound.

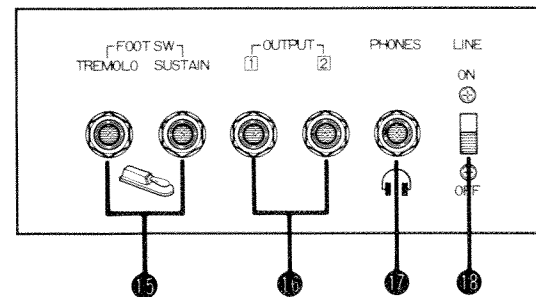
11 BALANCE
Balances or "mixes" the sound of filters 1 and 2 in relation to filters 3 and 4. Turning this control to the right increases the level of the **FILTER 3** and **4** sound in relation to the **FILTER 1** and **2** sound, while turning to the left increases the level of the **FILTER 1** and **2** sound in relation to the **FILTER 3** and **4** sound.
* If the **BALANCE** control is rotated towards a side where no filter is active, no sound will be produced. i.e. **FILTER 1** only engaged and the **BALANCE** control rotated fully to the right (3.4 side).

12 EQUALIZER
BASS: Turning the **BASS** control to the right (clockwise) emphasizes the low-frequency range thereby producing a fat, heavy sound. Turning this control to the left (counterclockwise) de-emphasizes the low-frequency range, while, set to its center position response is virtually flat.
TREBLE: Turning the **TREBLE** control to the right (clockwise) emphasizes the high-frequency range thereby producing a light, bright sound. Turning this control to the left (counterclockwise) de-emphasizes the high-frequency range, while, at its center position response is virtually flat.

13 VOLUME
Controls the overall volume level of the CP25 sound. Turning the **VOLUME** control to the right (clockwise) increases overall volume, while turning it to the left (counterclockwise) decreases overall volume.

14 POWER INDICATOR
This indicator lights to show that the rear-panel power switch is turned on.

SIDE PANEL



BLOCK DIAGRAM

