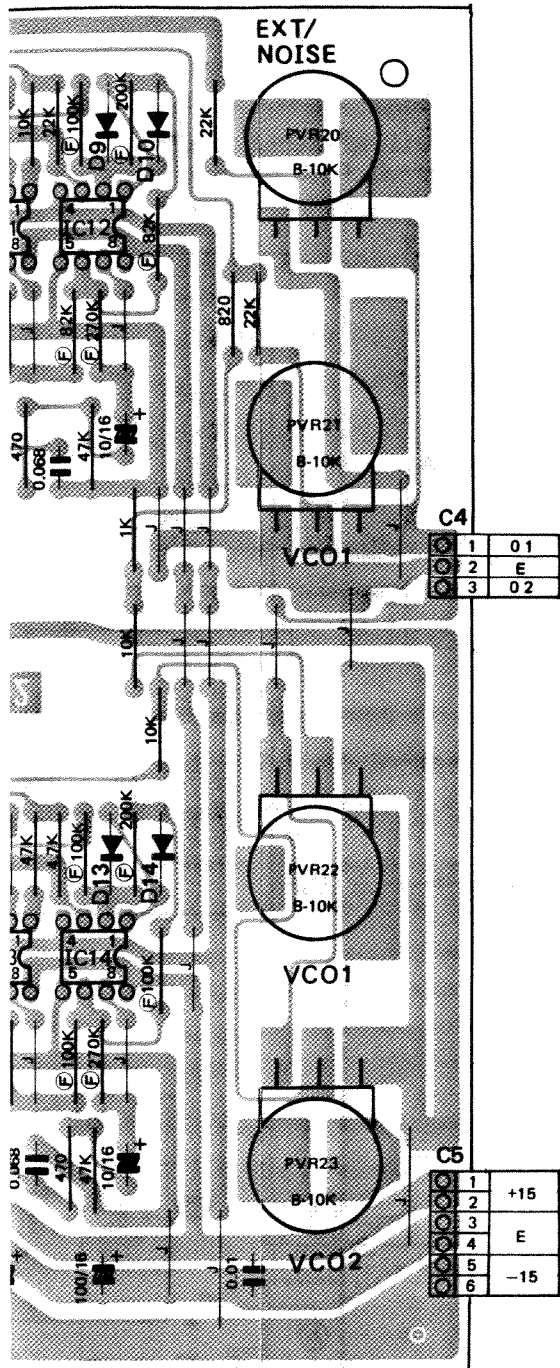
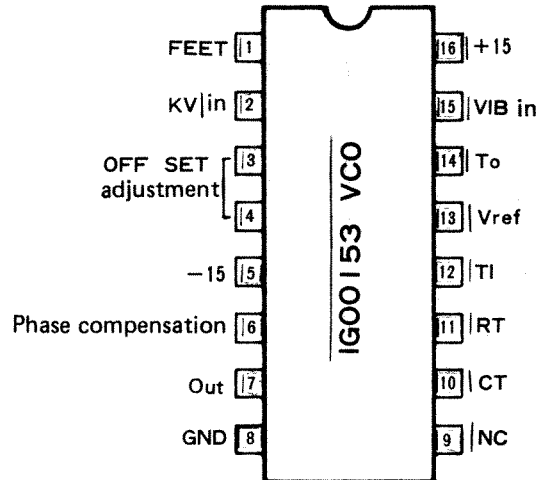


# CPA Circuit Board

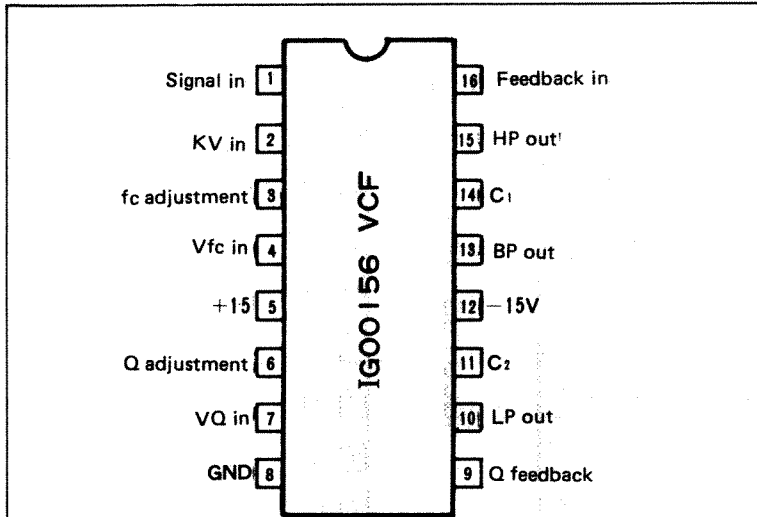


## ● VCO • IC (IG00153)

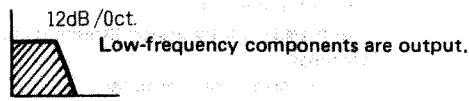


1. FT . . . . .FEET Change
2. KV . . . . .KEY VOLT input terminal
3. 4. OFF SET. . .VR4 connects to 3 and 4 which adjusts midpoint frequency (lower key's note) so that VCOIII I's output frequency correspond to KEY voltage.
5. VEE . . . . .-15V input terminal
6. Com . . . . .Terminal for phase compensation
7. Out . . . . .VCO output terminal ( )
8. GND . . . . .Ground terminal
9. NC . . . . .Unused
10. CT . . . . .C and R which determine frequency (highest key note) connect.
11. RT . . . . .Monostable multivibrator threshold voltage input terminal
12. TI . . . . .Time interval input terminal
13. Vref. . . . .Resistor which supplies regulated current connects
14. To. . . . .Integration capacitor connects
15. VIB . . . . .Vib in
16. Vcc . . . . .+15V input terminal

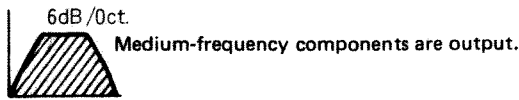
# ● VCF • IC (IG00156)



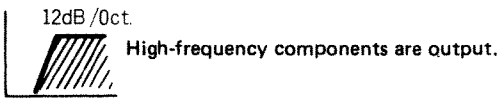
1. AI. . . . . Audio signal in  
Signal comes from VCO and WSC.
2. KV . . . . . Key voltage in  
Key voltage comes in to scan keyboard.
3. fc . . . . . Cutoff frequency adjustment  
Sets cutoff control current.
4. Vf. . . . . Cutoff voltage in  
Cutoff control voltage comes in to vary tone.  
Cutoff center is also adjusted.
5. Vcc . . . . . +15V input terminal
6. Qo . . . . . Q adjustment
7. VQ . . . . . Q control voltage in  
Control voltage comes in to vary Q.
8. GND . . . . . Ground
9. FB . . . . . Q feedback
10. LP. . . . . Low-pass filter output



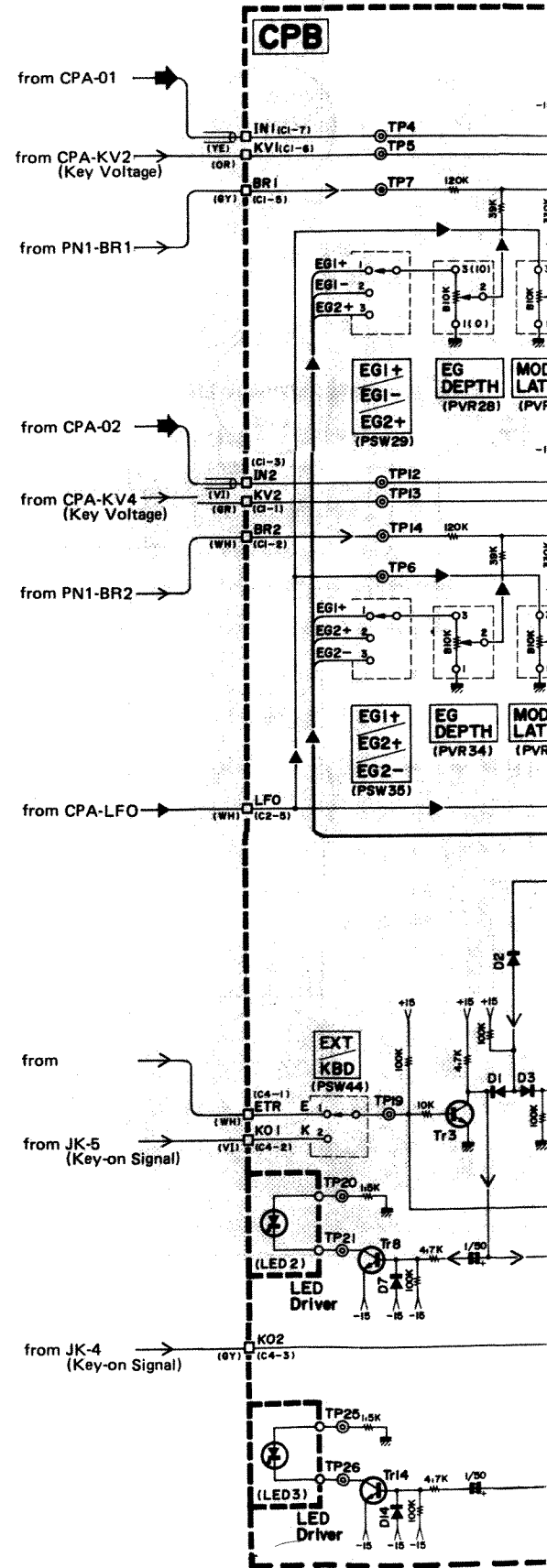
11. C2. . . . . Connects to capacitor determining cutoff frequency.
12. Vcc . . . . . -15V input terminal
13. BP. . . . . Band-pass filter output



14. C1. . . . . Connects to capacitor determining cutoff frequency.
15. HP . . . . . High-pass filter output

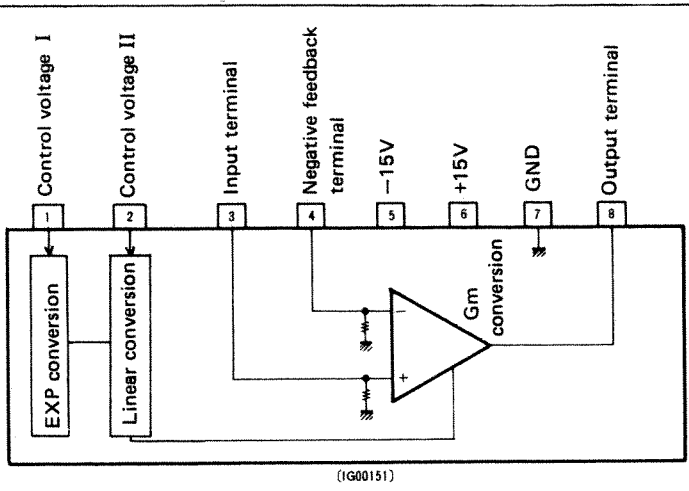
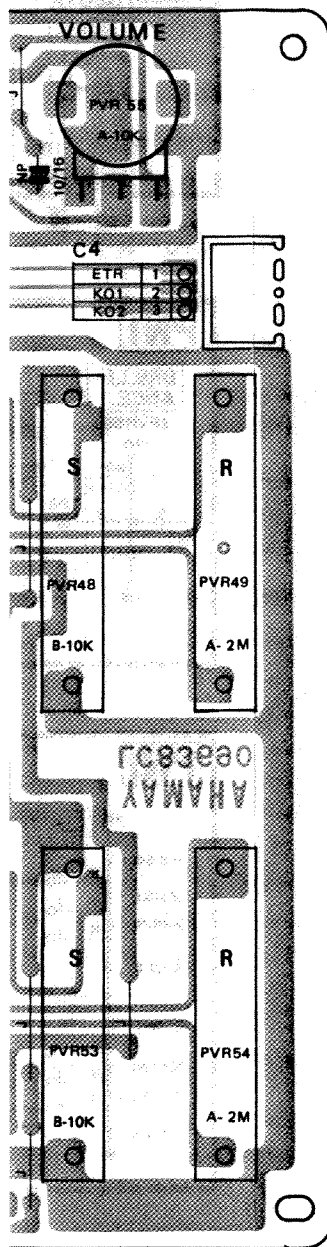


16. IN. . . . . Feedback in  
Feedback signal comes in which determines cut-off frequency.

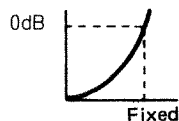


# CPB Circuit Board

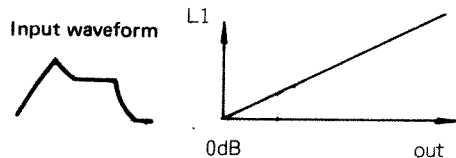
## ●VCA • IC (IG00151)



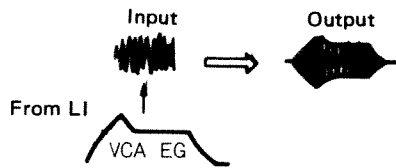
- 1. EI . . . . . Level control voltage in  
Control voltage comes in which varies level exponentially.



- 2. LI . . . . . Level control voltage in  
Control voltage comes in which varies level linearly.



- 3. +IN . . . . . Input  
Signal with modulated level comes in.



- 4. -IN . . . . . Negative feedback  
Unused normally.
- 5. Vee . . . . . -15V input terminal
- 6. Vcc . . . . . +15V input terminal
- 7. GND . . . . . Ground
- 8. OUT . . . . . Output  
Output current goes out.

