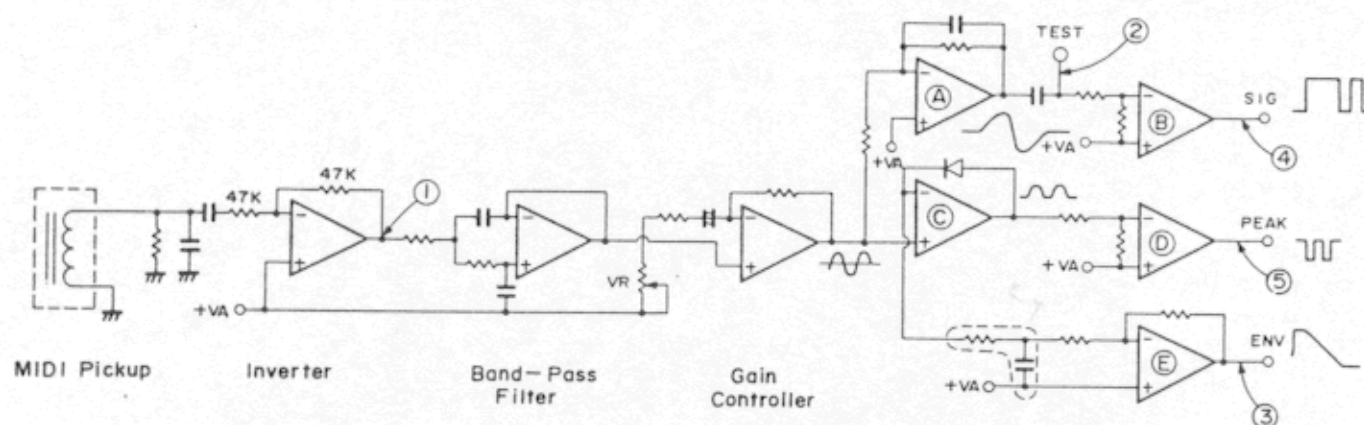


7 MIDI CIRCUITS

MIDI pickup converts the string vibration into current value.



After inverted, filtered, and gain-controlled, the signal from MIDI pickup is separated in three different signals.

- (1) SIG — — — For detecting the string frequency.
Integral circuit (A) eliminates the harmonics and, Comparator (B) turns the signal into square waveform.
- (2) PEAK — — — Timing signal for frequency detection.
Rectifier (C) extracts only positive portion of the waveform and, Comparator (D) inverts and turns it into a square waveform.
- (3) ENV — — — For the velocity and note ON/OFF detection.
From Rectifier output, an integral circuit of a capacitor and a resistor extracts the envelope signal only and, op amp (E) amplifies the envelope signal.

Actual waveforms at checkpoints (1) ~ (5) are shown on the next page.