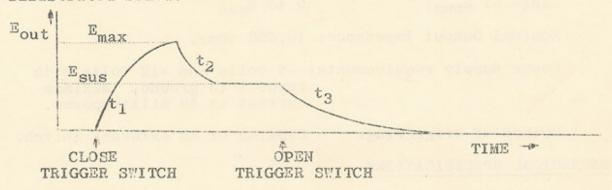
, ENVELOPE CONTROL VOLTAGE GENERATOR

MODEL 911

## GENERAL DESCRIPTION

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The Moog Model 911 Envelope Control Voltage Generator is a device for generating single voltage contours of the type illustrated below:



When the triggering switch (external to the Model 911) is closed, the output voltage  $E_{out}$  rises with a characteristic time  $t_1$ . When  $E_{out}$  reaches a set level  $E_{max}$ , it immediately begins to fall with a characteristic time  $t_2$ , and to approach and level off at  $E_{sus}$ . The output voltage remains at  $E_{sus}$  until the triggering switch is opened, at which time it falls to zero with a characteristic time  $t_3$ . The voltage-time contour is thus characterized by four variables: the rise time  $(t_1)$ , the initial decay time  $(t_2)$ , the sustain  $ext{level}$   $ext{level}$ 

The output voltage E<sub>out</sub> may be applied to the control input of any voltage-variable device. In particular, the use of the Model 911 in conjunction with a voltage-controlled amplifier such as the Moog Model 902 enables the composer to impart an extremely wide variety of amplitude envelopes to steady signals. Similarly, voltage-controlled oscillators and filters produce musically useful sounds when used in conjunction with the Model 911.

## ELECTRICAL SPECIFICATIONS

Range of t1: 10 milliseconds - 10 seconds

Range of to: 10 milliseconds - 10 seconds

Range of to: 10 milliseconds - 10 seconds

E<sub>max</sub> (Voltage at which t<sub>2</sub> begins): 5.5 volts ± 10%

Range of Esus: 0 to Emaix

Nominal Output Impedance: 10,000 ohms.

Power Supply requirements: -6 volts and +12 volts with

respect to ground. Maximum current is 50 milliamperes.

Method of triggering: Closing of an external switch.

MECHANICAL SPECIFICATIONS

Panel Size: 8-3/4" high x 2-1/8"wide

Depth behind panel:

Panel Components 4-Potentiometer knobs for t1,

t2, t3, and Esus.

1-Socket for external triggering

switch (Jones 5-302)

Rear Connector: Printed Circuit Board (Mates

with standard 22-pin connector.)

## REQUIRED ACCESSORIES

Power supply for supplying -6 volts and +12 volts. Either a regulated A.C. supply (e.g. Moog Model 910) or dry batteries is satisfactory.

- B. Enclosure for mounting instruments with 8-3/4" vertical panels.
- C. Any voltage-variable device, such as the Moog Model 901 Voltage-Controlled Oscillator, Model 902 Voltage-Controlled Amplifier, or Model 904 Voltage-Controlled Filter.