ADSR TRANSIENT GENERATOR

TRIG
D4
D5
R29 4.7K
CD4001 IC10C
R30 100K
R32 4.7K
D6
D7
R31 100K
IC10D CD4001
IC10A CD4001
GATE B
0/+7
IC10B CD4001
+6.8V
560
+15v
Z6 IN754A
C28 4.7
C27 .047
R34 100
IC12A CD4016
"ATTACK" 1M LOG SP3
+15v
Q3 2N5457
"DECAY" 1M LOG SP4
R35 1.2K
C18 2.2
SP6 1M LOG "RELEASE"
R36 10K
-15v
IC12B CD4016
IC12D CD4016
"SUSTAIN" 10K LIN SP5
R12 1K
ADSR OUT
IC13D MC3401
R38 430K
R37 470K
ADSR REPEAT TRIG
6.8V
SW1
+7v
AUTO
OFF
GATED
"ADSR REPEAT"
R60 4.7K
CD4016 IC11B
CD4016 IC11A
ADSR REPEAT GATE
R33 100K
GATE B
0/+7
IC11C CD4016
R39 100
"ATTACK" 1M LOG SP7
+15V
Q4 2N5457
R26 1K
AR OUT
"RELEASE" 1M LOG SP8
C19 2.2
R41 10K
R40 100K
IC11D CD4016
IC12C CD4016
-15v
D17
R62 33K
R61 100K
LOW FREQUENCY OSCILLATOR
C25 .01
D10
D9
R58 100K
D8
-12V
R59 100K
C22 .1
R52 220K
R51 33K
R50 15K
LFO FREQ 100K LIN SP9
IC14B ½1458
IC14A ½1458
D1
LFO
R56 1.5K
R53 560
R49 1K
LFO
-7v
R157 10K
R158 15K
SW2
VCO1
NOISE
S+H
R47 220K
IC13B ¼MC3401
+15v
Q5 2N5457
R64 1K
S+H
IC9C CD4016
R48 220K
C21 .1
R63 10K
-15v
SAMPLE + HOLD
AR TRANSIENT GENERATOR
+15v
R54 220
+12v TO IC14
Z4 IN759A
-15v
R55 220
-12v TO IC14
Z5 IN759A
+15v
TR9 100K NOISE BIAS
R44 33K
C20 2.2
R43 560
R45 220K
R66 1K
NOISE OUT
R42 100K
Q6 BC172B
N.C.
IC13A ¼MC3401
R46 470K
+7v
NOISE GENERATOR

NOTES:

1. ALL RESISTORS ¼W 5% TOL. UNLESS OTHERWISE MARKED
2. ALL CAPACITORS IN μF UNLESS OTHERWISE MARKED (p = PICOFARADS)
3. ALL DIODES IN914/4148
4. Q6 SELECTED FOR NOISE
5. Q3, Q4 SELECTED FOR LOW OUTPUT OFFSET VOLTAGE
6. O/O DENOTES KEY UP/KEY DOWN VOLTAGES

CAT SYNTHESIZER
MODEL 1853
BOARD A REV B