

POWER SUPPLY, $\pm 15\text{VDC}$

MEDTRONIC PROTECT

DESIGNER: D. ROSENDOOM

15 JUL 74

Toronto

L Monitor Speaker

R Monitor Speaker

LEFT AND RIGHT
AUDIO OUTPUTS
LEVEL CONTROLS

1 2 3 4

POWER ON
AND OFF

ENVELOPE FOLLOWER
OUTPUTS FOR INTERFACE
WITH EXTERNAL EQUIPMENT,
(SUCH AS X-Y STORAGE
SCOPE).

1 2 3 4
FILTERED BRAIN WAVE OUTPUTS

B - BRAIN WAVE BAND
SELECTOR SWITCH

L R
1 2 3 4

LEVEL CONTROLS FOR
MIXING INDIVIDUAL SIGNALS

PORTABLE GOLD AND
SILVER STORIES II
by DAVID ROSENBERG
for MEDTRONIC ARCHIVE

SOUND CONTROL MODE SELECTOR.
WAVE = CONTROL BY DIRECT BRAIN WAVE SIGNAL
SWEEP = CONTROL BY BRAIN WAVE ENVELOPE
THRESHOLD = BRAIN SIGNAL THAT CROSSES
A THRESHOLD INITIATES A
SWEEP THAT MOVES THE SOUND
UP AND DOWN HARMONIC SERIES

GAIN SELECT HIGH LOW
1 2 3 4
ELECTRODE INPUTS

VARIABLE GAIN
CONTROLS,
OPERATIVE ONLY
WHEN SWITCH
IS IN "HIGH"
POSITION.

FRONT PANEL DIAGRAM

MEDTRONIC PROJECT

DESIGNED BY D. ROSENBERG

5-11-75 TEL-AVIV

410 POT

POT

+V

-V

410 POT

IN (A)

GND

IN (B)

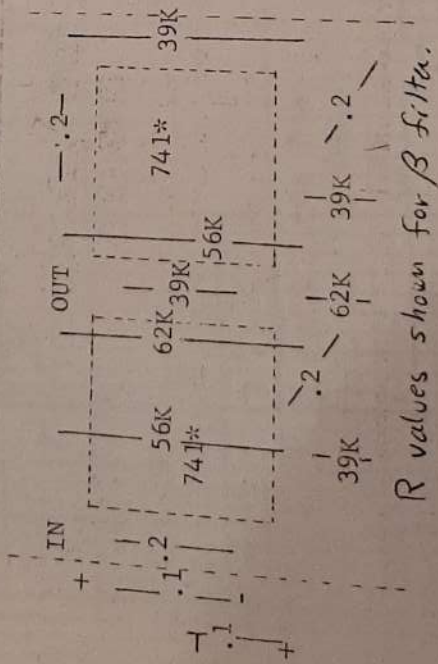
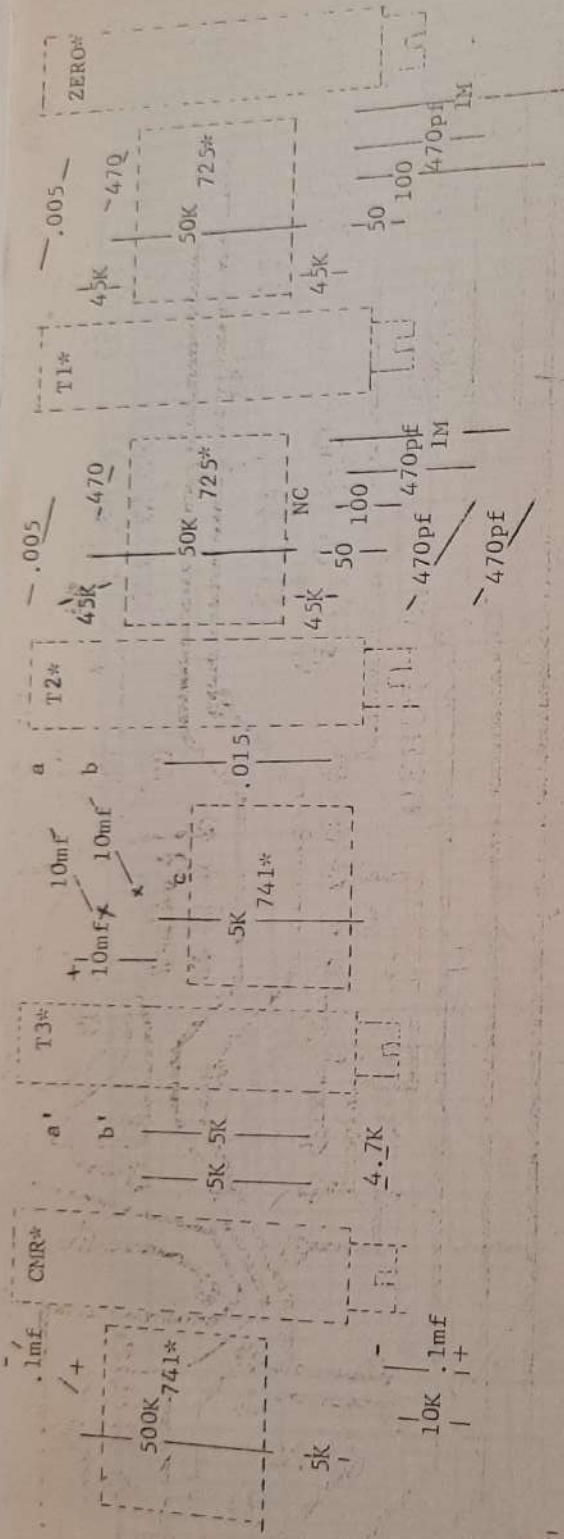
+V

-V

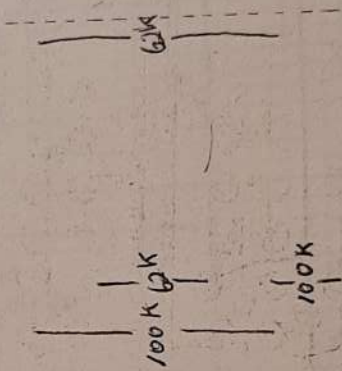
-V

GND

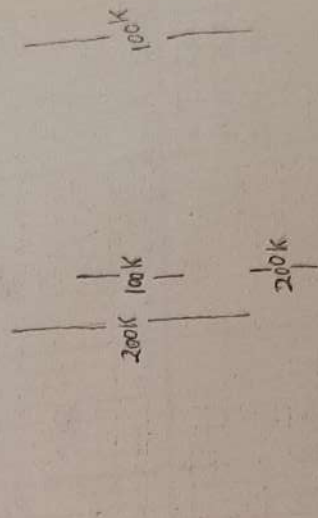
GND



R values shown for β filter.



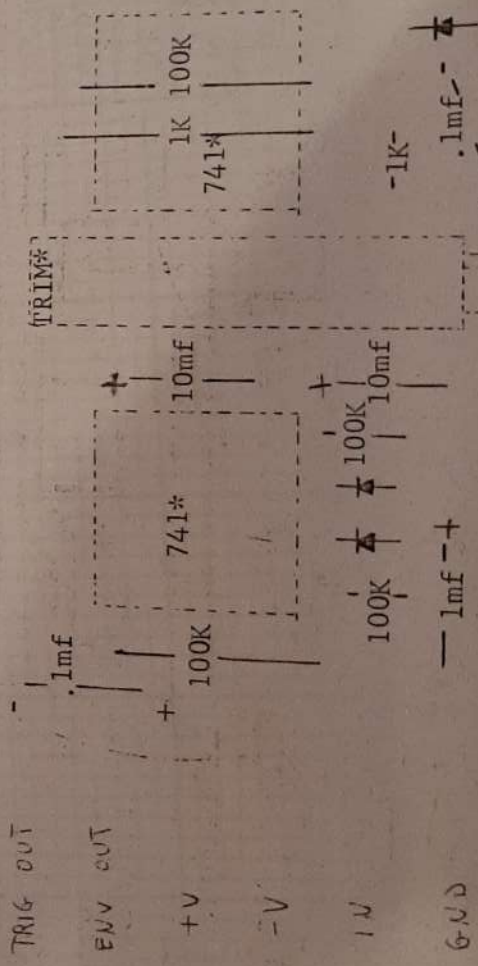
Duplicate section; R values shown for α filter.



Duplicate section; R values shown for θ filter.

PRINTED CIRCUIT LAYOUT

FOR BIOSIGNAL PREAMP,
BRAIN WAVE FILTERS,
AND ENVELOPE FOLLOWER/
THRESHOLD DETECTOR
BOARDS.



DESIGNER: D. ROSENBAUM & A. J. GABUDA

NEOTRUC 03A

Duplicate for sections
2 through 4.

39K
10
56K

Brain wave band
selector switch

out to envelope
follower.

$\alpha (8-13 \text{ Hz})$

BRAIN WAVE BAND PASS FILTER

MEDTRONIC PROJECT

DESIGNER: D. ROSENBLUM

4 J 24 TORONTO