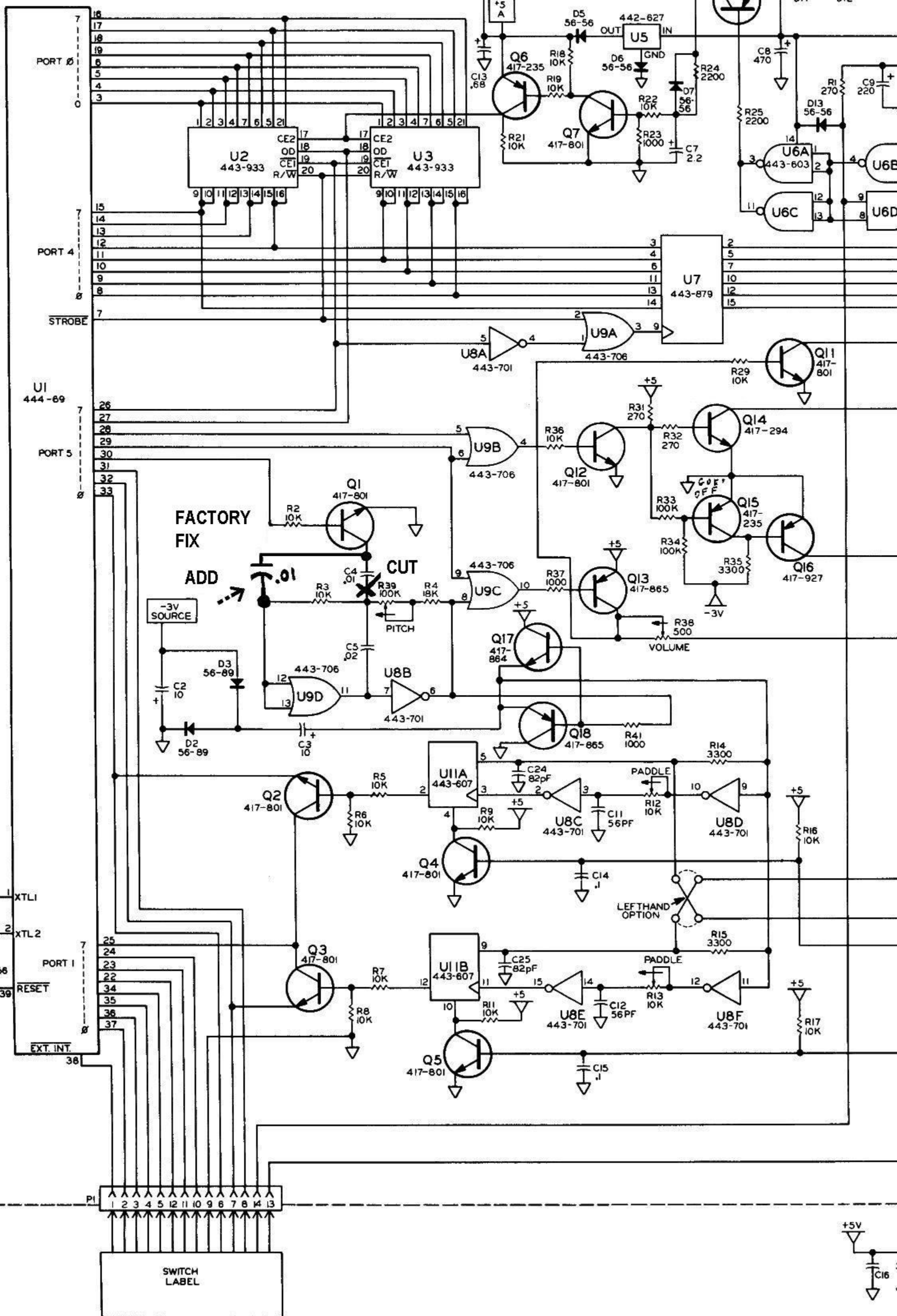
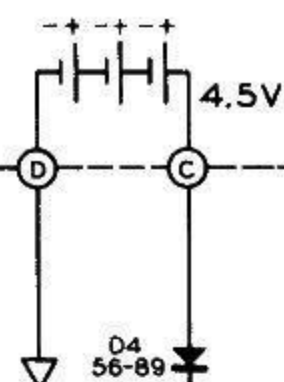


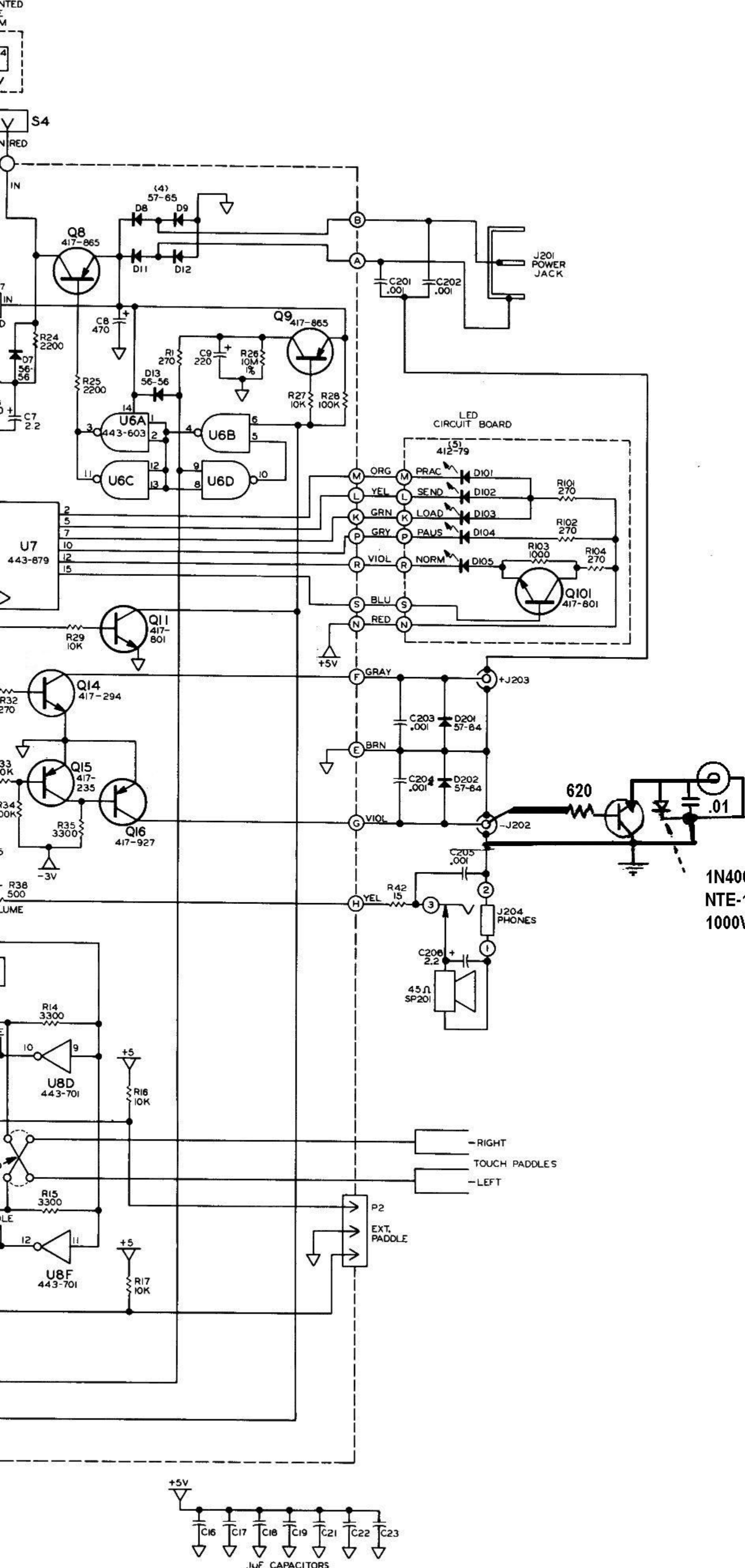
3 TYPE A76

PART MOUNTED
IN CASE
BOTTOM

#442-54
U4



*SEE "KEYPAD SWITCHING
PATTERN" TABLE



SCHEMATIC
HEADSET
SA
μMATE

NOTES:

1. PARTS ARE NUMBERED IN THE FOLLOWING MANNER:
1-49 PARTS ON THE MAIN BOARD
100-109 PARTS ON THE LED BOARD
200-209 PARTS ON THE CASE
2. ALL RESISTORS ARE 1/4-WATT
RESISTOR VALUES ARE IN OHMS, KILOHMS, OR MEGOHMS
3. CAPACITOR VALUES ARE IN PICO, MICRO, OR MILLIFARADS
4. THIS SYMBOL INDICATES GROUND
5. THIS SYMBOL WITH A LETTER INDICATES A WIRE CONNECTED TO A POINT ON THE BOARD
6. THIS SYMBOL INDICATES AN LED

External option
add for
hi-current
negative
keying

1N4006
NTE-125
1000V/2.5 A

*KEYPAD S

PRESS	KEY
OFF	
ON	
TUNE	
STOP	
P/C	
LOAD	
SEN	
WPM	
SPC	
WT	
RPT	
PRA	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

IC Vcc AND

IC	GND PIN
U1	20, 21
U2	8
U3	8
U4	
U5	
U6	7
U7	8
U8	8
U9	7
U11	6, 7, 8

SCHEMATIC OF THE
HEATHKIT®
SA-5010
µMATIC KEYSER

NOTES:

- 1. PARTS ARE NUMBERED IN THE FOLLOWING GROUPS:
1-49 PARTS ON THE MAIN CIRCUIT BOARD.
100-109 PARTS ON THE LED CIRCUIT BOARD.
200-209 PARTS ON THE CASE.
- 2. ALL RESISTORS ARE 1/4-WATT, 5% UNLESS MARKED OTHERWISE.
RESISTOR VALUES ARE IN OHMS (K=1000, M=1,000,000).
- 3. CAPACITOR VALUES ARE IN µF UNLESS MARKED OTHERWISE.
- 4. ▽ THIS SYMBOL INDICATES A CIRCUIT BOARD GROUND.
- 5. ○ THIS SYMBOL WITH A LETTER OR NUMBER IN IT INDICATES
A WIRE CONNECTED TO THE CIRCUIT BOARD.
- 6. ➞ THIS SYMBOL INDICATES A PLUG-IN CONNECTION.

*KEYPAD SWITCHING PATTERN

PRESSED KEY	PINS CONNECTED
OFF	9, 14
ON	9, 13
TUNE	1, 9
STOP	2, 6
P/C	6, 11
LOAD	6, 10
SEND	3, 6
WPM	2, 7
SPC'G	3, 7
WT	7, 11
RPT	7, 12
PRAC	6, 12
0	5, 8
1	8, 11
2	4, 8
3	2, 8
4	8, 12
5	8, 10
6	3, 8
7	7, 10
8	5, 7
9	4, 7

IC Vcc AND GROUND PIN CONNECTIONS

IC	GND PIN #	+5V PIN #	+5A PIN #
U1	20, 21	40	
U2	8		22
U3	8		22
U4			
U5			
U6	7		
U7	8	1, 16	
U8	8	1	
U9	7	14	
U11	6, 7, 8	14	