

# RES 24 - Touch Responsive Keyboard

Bill of Materials (final ~ 2009/06/06)

Q	Part	Alt.	Note
Resistors			
2	4k7		
7	6k8		
7	8k2		
1	10k		
9	33k		
12	47k		
6	68k		
12	10M		
6	22M		or 2 x 10M in series
1	10k		Trimmer (Zero adjust)
1	20k		Trimmer (Drive)

## Capacitors

6	10pF		
6	22pF		5%
1	430pF		
6	1n		
6	10n		(2 for decoupling, ceram.)

## Semi's

30	1N914	<i>1N4148</i>	
3	LM3900	<i>MC3401</i>	14-pin DIP
3	BC547	<i>2SC1815 or any general purpose npn transistor</i>	

## Misc.

14	jacks		
1	.156 4-pin header		optional
3	14-pin IC sockets		optional
2	PCB (RES24 + keyboard PCB)		

## Notes

- \* Keep both PCB's close to eachother. Wiring between both should be kept tight!
- \* If sticking to just the 6 keys only, the 20K trimmer (Drive) can be replaced by a 15K resistor.
- \* Adjust the 10K trimmer for zero gate & voltage outputs for all keys.
- \* The common voltage output (CCVO) is dominated by whichever key is touched hardest.
- \* The common gate output (CGO) is optional, but nice to have.