## PCB 111000 1 Parts list

ATMEGA 328/P Rapid Electronics 73-4281 / 73-4283 SM PB switch Rapid Electronics 51-0709 One off required per pcb TH PB switch Rapid Electronics 51-0711 Three off required per pcb

UNO PCB Radio Spares 769-7409

Watch crystal Radio Spares 547-6985 or 478-9268 (Connected between B6 and B7 of the Atmega)

Display x 2 CC56-21SURKWA Radio Spares 872-2014 CA56-12SYKWA Radio Spares 872-1954

Dual CC LED Radio Spares 228-5764

6 way header x 3 Radio Spares 681-2994

8 way header Radio Spares 681-2997

Resistors and capacitors (All Surface mount size 1206)

R16 R1-7, R10 – R12 R8 – R9	100R 220R 560R	(560R on cct. diagram not really recommended)
R17	1K	
R14 – R15 R13	3K9 10K	
C1, C5 – 7 C3-4 C2	10nF 100nF 4u7	

## **Recommendations for assembly**

Fit all surface mount components and the link that determines whether common cathode or common anode displays are to be fitted (see photos).

Plug the headers into the UNO. Place the board over the headers component side down.

Trim the headers that would otherwise interfere with the displays.

Solder the PCB to the headers

Solder on all switches.

Unplug the pcb from the UNO.

Solder the crystal to the component side of the pcb.

Add the Atmega 328.

Add the displays (see photo for orientation)

Finally add the LED and plug the pcb back into the UNO.

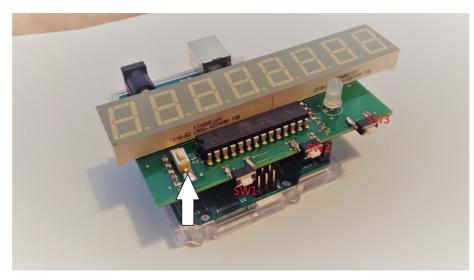


Photo of PCB111000\_UNO

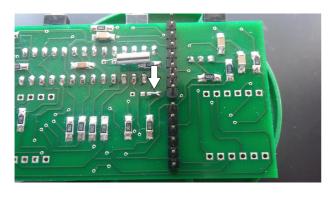
Note: Orientation of the displays. User switch numbers.

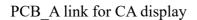
White arrow shows PCB\_A reset switch.

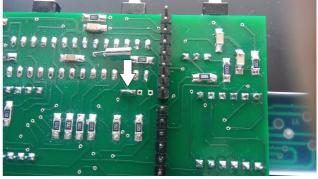
Orientation of LED is not critical.



Photo of PCB\_A







PCB\_A link for CC display