

PCB - CONSTRUCTION STAGES

STEP ONE

- 1) FIT 12 BLUE OUTER LEDS
- 2) FIT 4 WHITE MINUTE LEDS
- 3) FIT 1 BLUE ALARM LED
- 4) FIT THREE LINKS
- 5) FIT TWO 10K RESISTORS

STEP TWO

- 6) FIT TWENTY FOUR FILAMENT LEDS (TAKE GREAT CARE IN HANDLING)

STEP THREE

- 7) PREPARE SOCKETS FOR CLOCK AND NANO IF REQUIRED
- 8) FIT FIVE PIN STRIP TO CLOCK MODULE
- 9) SEPARATE FOUR PINS
- 10) SOLDER FOUR PINS IN PCB
- 11) SOLDER SOCKETS (IF USED) IN PCB
- 12) SOLDER CAPACITOR IN PCB - NOTE POLARITY)
- 13) SOLDER SOUNDER TO PCB (NOTE POLARITY)
- 14) SOLDER POWER MODULE ON FOUR PINS (SOCKET FACES INWARDS)
- 15) SOLDER IN FOUR SWITCHES (ENSURE THEY SIT FLAT TO THE PCB)
- 16) MOUNT CLOCK USING SUPPLIED FITTINGS
- 17) PLUG ARDUINO NANO INTO SOCKET (MICRO PLUG TO PCB CENTRE)

THE BOARD IS COMPLETE. BEFORE POWERING UP CHECK ALL COMPONENTS ARE IN THE CORRECT WAY ROUND. IN PARTICULAR THE FILAMENT LAMPS.

A SOLDER AREA TO CHECK CAREFULLY IS THE JUNCTION OF THE FILAMENT LEDS. MAKE SURE THE LOOP TO THE PCB IS SOLDERED AND THE FILAMENTS PINS SOLDERED TO THE LOOP. FAILURE WILL OCCUR IN THE FUTURE IF THE FILAMENT PINS ARE ONLY MAKING MECHANICAL CONTACT