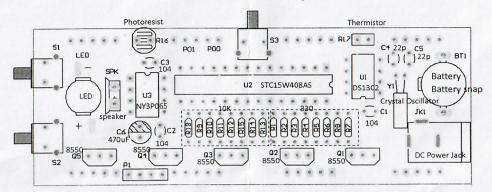
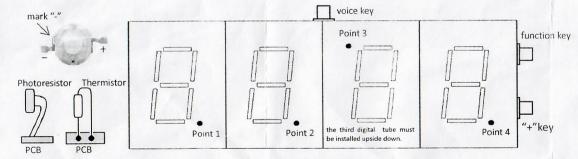
## Installation Manual of Talking Clock



- 1. Install the 10K  $\Omega$  resistor (R18 R9 R10 R11 R12 R15 R14 R13) and 330  $\Omega$  (R1 R2 R3 R4 R5 R6 R8 R7), there is no negative or positive cathode on the resistor;
- 2. Install crystal oscillator Y1 (it shall be installed horizontal with the circuit board), then install two pieces of 22P ceramic capacitors (C4 C5) and three pieces of 104 ceramic capacitors (C1 C2 C3);
- 3. Install battery snap BT1: the opening of the battery snap is outward to make the installation of battery convenient; then, install the luminous LED, the end marks with "-" on the pin on LED refers to the negative electrode;
- 4. Install two pieces of IC sockets (U1 U3) with eight pins and one IC socket (U2) with 28 pins: The side of IC socket with notch faces to the circuit board with the sign of notch;
- 5. Install three pieces of side switches (S1 S2 S3);
- 6 Install five pieces of S8550 Transistor (Q1-Q5): The side with letters on Transistor faces the inside of circuit board, and the height for installation shall be the same as the Tact Push Button Switch.
- 7. Install electrolytic capacitor (C6): the long pin of electrolytic capacitor is the positive pole, while the short pin refers to negative pole, the negative pin faces against the shadow on the circuit board, and then install DC power Jack (JK1);
- 8. Install photoresistor (R16): the photoresistor does not have positive and negative electrodes; the pin of photoresistor remains 15mm, a weld it on the circuit board, and bend the photoresistor to upward the light end;
- 9. Install thermistor (R17): the thermistor does not have positive and negative electrodes;
- 10. Install digital tube: confirm all welds are in good condition, there are no solder skips, insufficient solder, no short circuit between two welds before installing the digital tube, and then install the digital tube. The third digital tube shall be installed upside down;



- 11. lastly, install IC and batteries with snap (snap battery can only be used temporary and it won't supply power for the clock), use 5V for power supply;
- 12.Reset: press "voice key", "function key" and "+"key for five seconds, at this time, the clock displays 7:59, then it turns to 8:00 after five seconds, and the clock tell the time automatically, which means the reset is done;
- 13. Reset time, clock and hourly chime functions;
- a. adjust "hour": press the "function key" (the digital tube of hour blinks, and the second point blinks), press "+" to adjust "hour":
- b. adjust "minute": press the "function key" again ( the digital tube of minute blinks, and the second point blinks), press "+" to adjust "minute";

c. adjust the "hour" of alarm clock: press the "function key" again ( the digital tube of hour blinks), press "+" to adjust "hour"; d. adjust the "minute" of alarm clock: press the "function key" again ( the digital tube of minute blinks, press "+" to adjust "minute":

e. set up whether to activate the function of alarm clock: press the "function key" again ( all digits remain the same), press "+" key, "point 4" lights (alarm clock activated), "point 4" is not light (alarm clock inactivated);

f. adjust "Hourly chime" time, press the "function key" again (the digital tube of hour blinks, and, press "+" to adjust "hour"; (for example, if you adjust it to 9, then it will start the hourly chime since 9AM); press the function key" again (the digital tube of minute blinks, press "+" to adjust the time to end the hourly chime (if you adjust it to 23, it means, it will have hourly chime from 9AM to 23PM, and there is no hourly chime during the rest hours and won't affect your sleep);

g. set up the status of hourly chime function: press "function key" again (all digits remain the same), press "+"key, "point 3" lights (chime function activated), "point 3" does not light (hourly chime function turned off)

h. press "function key" to exit, and the setting completed;

14. Adjust temperature, set up date and week day

Press "+", it shows the temperature; press "function key" to adjust the temperature (press it for a while, it will recover to its default temperature), press "+" again to adjust the temperature; meanwhile, it enters the function to adjust the year, press "function key" (year blinks), press "+" to adjust year (it will add the year forward automatically if pressed it steadily), press "function key" for confirmation; press "+" again to adjust the date, press "function key" (month blinks), press "+" to adjust month; press "function key" (day blinks) press "+" again to adjust the day; press "function key" to confirm the day; press "+" again (it shows the week day), press "function key" (the week day blinks), press "+" to adjust the week day, press "function key" for confirmation, and then press "+" again to exit.

15. Mode Setting: Pres both "voice key" and "function key" at the same time, and it shows 1, press "function key" to choose mode 1 (automatic circularly display of time, temperature, date and week day); mode 2 (time and temperature shows circularly); mode 3 (only display time). Press "+", it shows 24, press "function key" to choose 12 (12 hours system) or 24 (24 hours system). Press "+" it shows C, press "function key", choose F (Fahrenheit) or C (centigrade), press "+" to exit.

16. light-operated function: when it turns dark at night, the digital tube turns dark automatically; when the light is bright, the digital tube lights up: If the photoresistor has short circuit, the digital tube will light up all the time;

- 17. pressed it steadily "voice key", you can control the LED lights ON and OFF.
- 18. Paste a film on the digital—tube, the film has a layer of glue, tear off the film and paste them on four digital—tubes, cut off the excessive edges, then the effect will be better;
- 19. Install the cover: tear off the protective film on the cover and fix the cover with screws;
- 20. Schematic circuit diagram

