## Digital hour meter programming steps

## Step 1 - Burning Bootloader

- 1. Open the memory clearing program or main program from the folder named Digital Hour meter.
- 2. Take care that the cursor doesn't fall on the editor area.
- 3. Place the IC in the Hour meter programming board.
- 4. Select Tools.
- 5. Select Board.
- 6. Select MiniCore.
- 7. Select Atmega328.
- 8. Select Tools.
- 9. Select Variant.
- 10. Select 328 / 328A.
- 11. Select Tools.
- 12. Select a programmer.
- 13. Select Arduino as ISP (MiniCore).
- 14. Select Tools.
- 15. Select Burn Bootloader.
- 16. After the Message shows Done burning bootloader, IC can be removed to program another IC.

## Step 2 - Uploading memory clearing program

- 1. Open the memory clearing program from the Digital Hour meter folder.
- 2. Take care that the cursor doesn't fall on the editor area.
- 3. Place the **bootloaded** IC in the Hour meter programming board.
- 4. Select Tools.
- 5. Select Board.
- 6. Select "breadboard-avr (in sketchbook)"
- 7. Select "Atmega328 on a breadboard (8 MHz internal clock)"
- 8. Select Tools.
- 9. Select a programmer as "Arduino as ISP"
- 10. Select Sketch.
- 11. Select "Upload using programmer Ctrl + Shift + U"
- 12. After the Message shows Done Uploading, the main program can be uploaded using the below mentioned steps.

## Step 3 - Uploading the Main program

- 1. Open the main program from the Digital Hour meter folder.
- 2. Take care that the cursor doesn't fall on the editor area.
- 3. Place the **bootloaded and memory cleared** IC in the Hour meter programming board.

- 4. Select Tools.
- 5. Select Board.
- 6. Select "breadboard-avr (in sketchbook)"
- 7. Select "Atmega328 on a breadboard (8 MHz internal clock)"
- 8. Select Tools.
- 9. Select a programmer as "Arduino as ISP"
- 10. Select Sketch.
- 11. Select "Upload using programmer Ctrl + Shift + U"
- 12. After the Message shows Done Uploading, the patient time timer will be displayed on the OLED display.