

```
int main (void){
char User_response;
char digits[8], start_time[8];
unsigned char input_mode;
char keypress;

setup_HW_Arduino_IO;

if(switch_3_down){eeprom_write_byte((uint8_t*)(0x02),255);           //Set the EEPROM location 2 to its default value
Serial.write("EEPROM reset\r\n");
while(switch_3_down);SW_reset;}

if (switch_1_up)                                                     //Press SW2 to omit user prompt
{User_prompt_A;}
while (switch_1_down);

input_mode = eeprom_read_byte((uint8_t*)0x02);                       //Read mode. Default value is 255

switch (input_mode){
case 255:                                                             //If EEPROM contains 255 initiate the clock
Serial.write("\r\nSend time: hours mins secs\
(24Hr clock)");

clear_display;
for (int m = 0; m < 8; m++)
{
keypress = waitforkeypress_A();                                       //Obtain time from KBD

if((m == 2) || (m == 5))
{digits[0] = ' ';save_to_eeprom;
shift_display_left; m += 1;}

digits[0] = keypress;
save_to_eeprom;
I2C_Tx_8_byte_array(digits);
if (m < 7){shift_display_left;}}

eeprom_write_byte((uint8_t*)(0x02),0);                               //Update mode and save in EEPROM location 2

Serial.write("\r\nFollow carefully (POR may be needed)!!\r\nPress SW1 & Power cycle!:\
Can now use 5V USB charger if required.\r\n\
Release SW1 ro restart clock at time entered.\r\n");

break;                                                                //Exit and send Start clock command

case 0:                                                               //If EEPROM location 2 contains 0 start clock immediately
eeprom_write_byte((uint8_t*)(0x02),255);                             //Restore the EEPROM location 2 to its default value
break;

default: eeprom_write_byte((uint8_t*)(0x02),255);                   //If EEPROM ever gets corrupted reset it to 255 (0b11111111)
wdt_enable(WDTO_15MS); while(1);break;}

for (int m = 0; m < 8; m++)
{start_time[m] =
eeprom_read_byte((uint8_t*)(m+3));}

I2C_Tx_OS_timer(AT_clock_mode, start_time);                          //Send Start clock command (AT clock mode is 7)

while(1);}
```