Game&Light Manual.
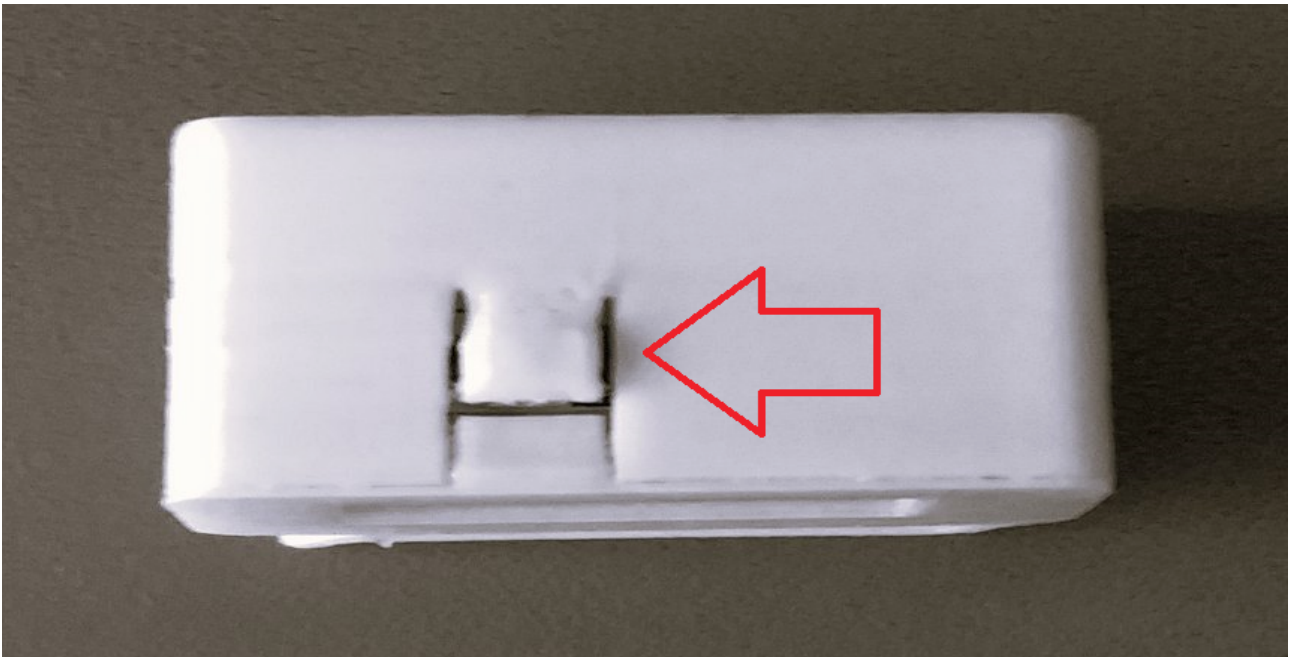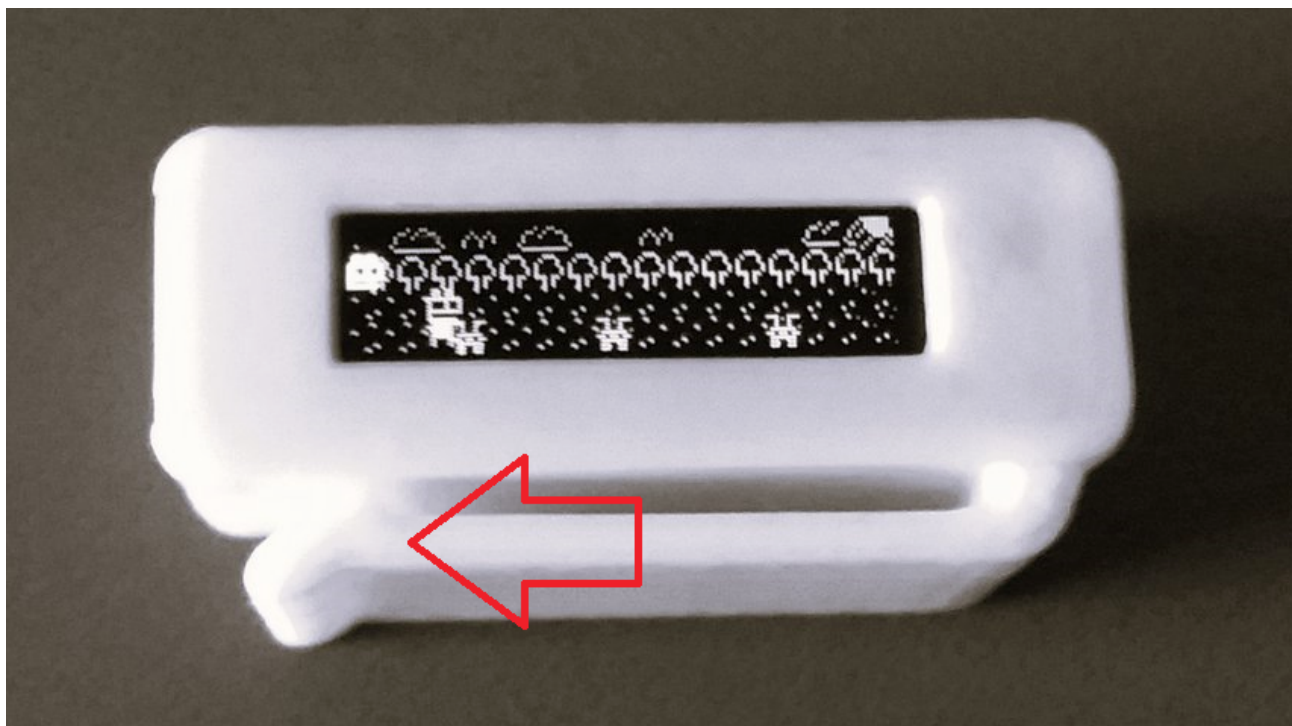
To start using the device just press the top and only button it turns on the device cycle throw modes and it is used to play the game or interact with the software.

Game&Light includes a clip to secure it to your pocket or backpack and it also has a hole to pass a string to use it as a keychain

The device turns out automatically after a short period of time to save battery.
When you turn on the device it the modes are as follow: (press the button to advance to the next mode) light mode > leds blinking mode > app or game.

To charge the device simply connect it to any usb port, when the device is charged and if it is not being used the leds will turn on and off every 4 seconds.
It is recommended that once charged, disconnect the device.
If the voltage is too low the device will remain off and refuse to power on until charged to preserve the life of the LIC capacitor.
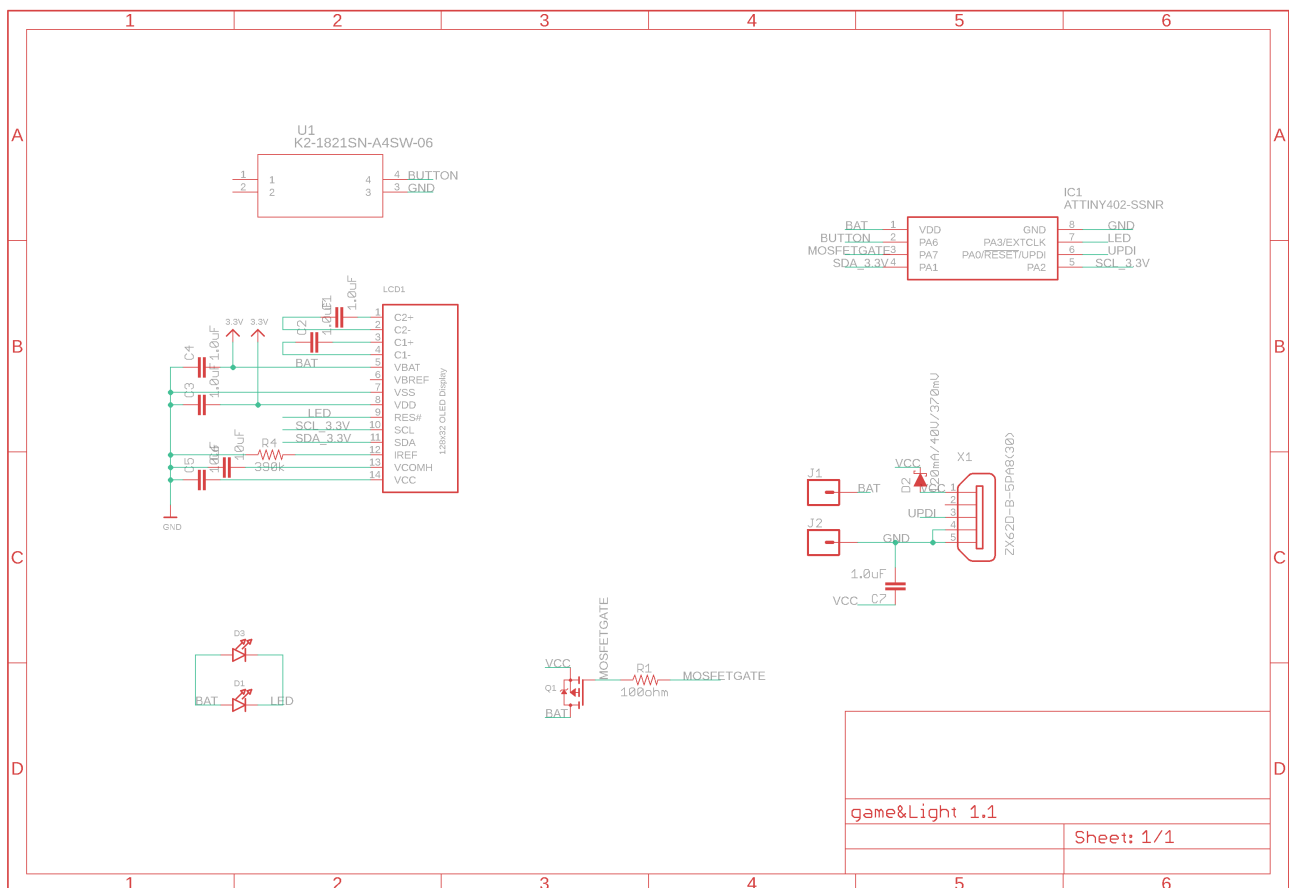
Technical specs:

-MCU: Attiny 402 4k of flash
-Battery: LIC 40F
-Input: 1 push button.
-Screen: 128x32 oled, 1306 chip. 14 pins.

U1
K2-1821SN-A4SW-06

BUTTON
GND

IC1
ATTINY402-SSNR

	VDD	GND		GND
BAT	PA6	PA3/EXTCLK		LED
BUTTON	PA7	PA0/RESET/UPDI		UPDI
MOSFETGATE	PA1	PA2		SCL_3.3V
SDA_3.3V				

LCD1
128x32 OLED Display

1	C2+
2	C2-
3	C1+
4	C1-
5	VBAT
6	VBREF
7	VSS
8	VDD
9	RES#
10	SCL
11	SDA
12	IREF
13	VCOMH
14	VCC

3.3V 3.3V
C4 1.0uF
C3 1.0uF
C2 1.0uF
BAT
LED
SCL_3.3V
SDA_3.3V
R4 390k
C5 1.0uF
GND

X1
ZX62D-B-5PA8(30)
200mA/40U/370mU

J1 BAT
J2 GND
VCC
UPDI
1.0uF
VCC C7

D3
D1
BAT LED

MOSFETGATE
VCC
Q1
R1 100ohm
MOSFETGATE
BAT

game&Light 1.1
Sheet: 1/1

If you want to flash a new game a USBtoUPDI adapter is needed, you can build your own with the following schematic.

Or you can visit this page to make your own, UPDI signal is feed into the D+ signal of the USB cable you will probably need to cut a Micro USB cable.
AVR-Guidance/jtag2updi.md at master · SpenceKonde/AVR-Guidance (github.com)

And to develop you r own software please Arduino IDE is recommended :

CHECK FLASH SETTINGS FOR THE ARDUINO IDE BEFORE FLASHING, BURN BOOTLOADER FIRST.

Placa: "ATtiny412/402/212/202"

Chip: "ATtiny402"

Clock: "5 MHz internal"

millis()/micros() Timer: "Disabled (saves flash)"

Startup Time: "8ms"

BOD Voltage Level (burn bootloader req'd): "1.8V (5 MHz or less)"

BOD Mode when Active/Sleeping (burn bootloader req'd): "Disabled/Disabled"

Save EEPROM (burn bootloader req'd): "EEPROM retained"

attachInterrupt() Version: "Only enabled ports"

printf(): "Minimal, 1.1k flash used"

Wire (Wire.h/I2C) Library mode: "Master or Slave (saves flash and RAM)"

Puerto: "COM7"

Obtén información de la placa

CONFIGURE SERIAL PORT AND PROGRAMMER TO MATCH YOURS.

INSTALL:
Tinyi2c library, deafult wire library is too big https://github.com/technoblogy/tiny-i2c

Megatinycore: https://github.com/SpenceKonde/megaTinyCore

Example:

LED-BOY/Space-Ivaders-Light: game for attiny series 0, 1 and 2 (github.com)