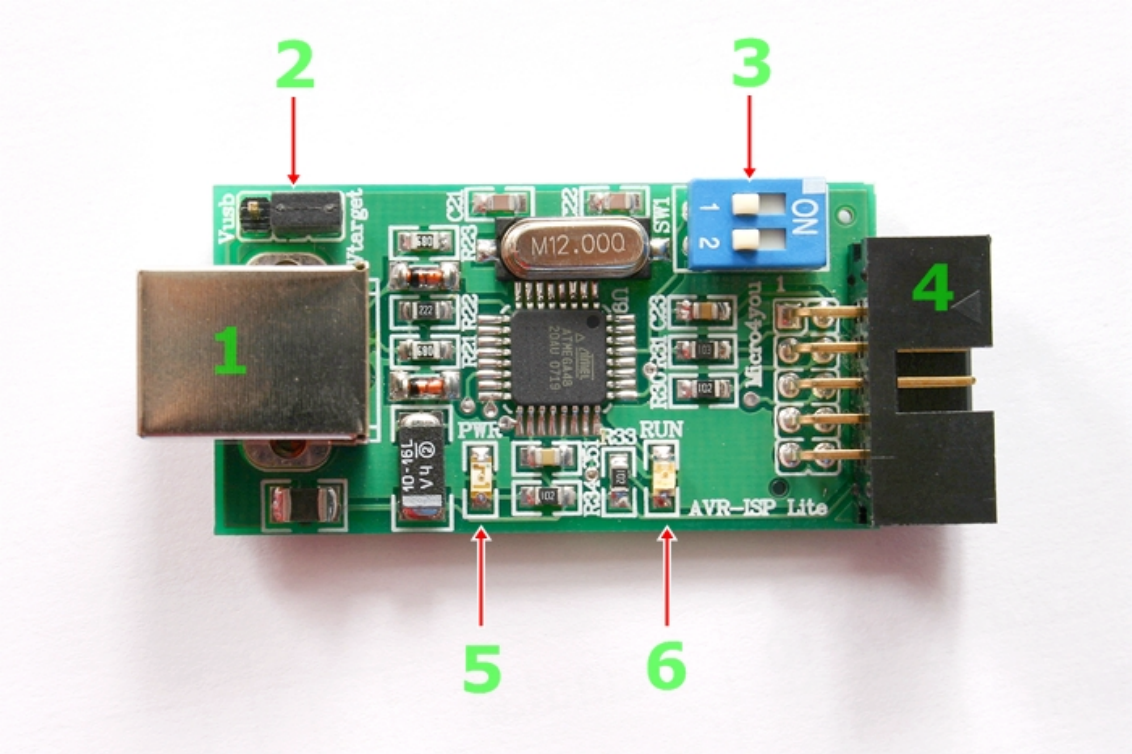
USBASP AVR USB ISP Programmer Lite



1. USB Port
2. Power select Jumper

- Vusb - Power from USB Port. And the USBASP can supply target board with 5V (USB voltage), up to about 100mA to the device (not recommende)
- Vtarget - Power 3.3V to 5.5V from Target Board (default)

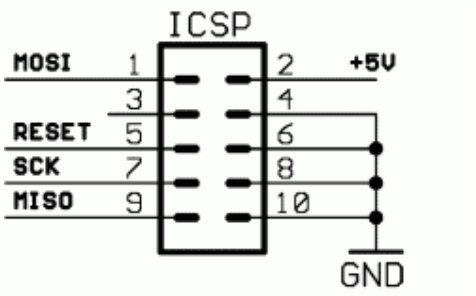
3. Number 1 ON = For firmware upgrade (not self-upgradable), Set this jumper for flashing the ATMega48 of USBASP with another working programmer.

   Number 1 OFF = Normally

   Number 2 ON = If the target clock is lower than 1,5 MHz, you have to set this jumper.Then SCK is scaled down from 375 kHz to about 8 kHz.

   Number 2 OFF = SCK speed is 375 kHz (default)

4. standard 2x5-pin AVR ISP header



5. Red LED indicates that the status of Power Supply.
6. Green LED indicates that the USBASP is 'busy' programming.

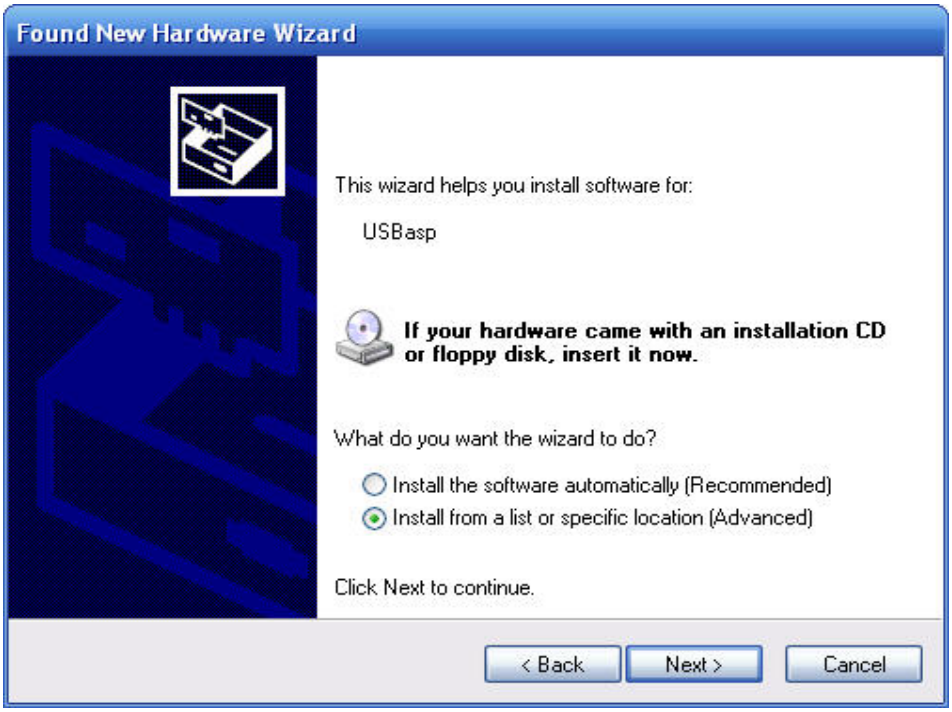
Install a driver

You can download a last driver from http://www.micro4you.com/store/usbasp-avr-usb-isp/prod_52.html (USBasp-driver-0.1.12.1.zip)

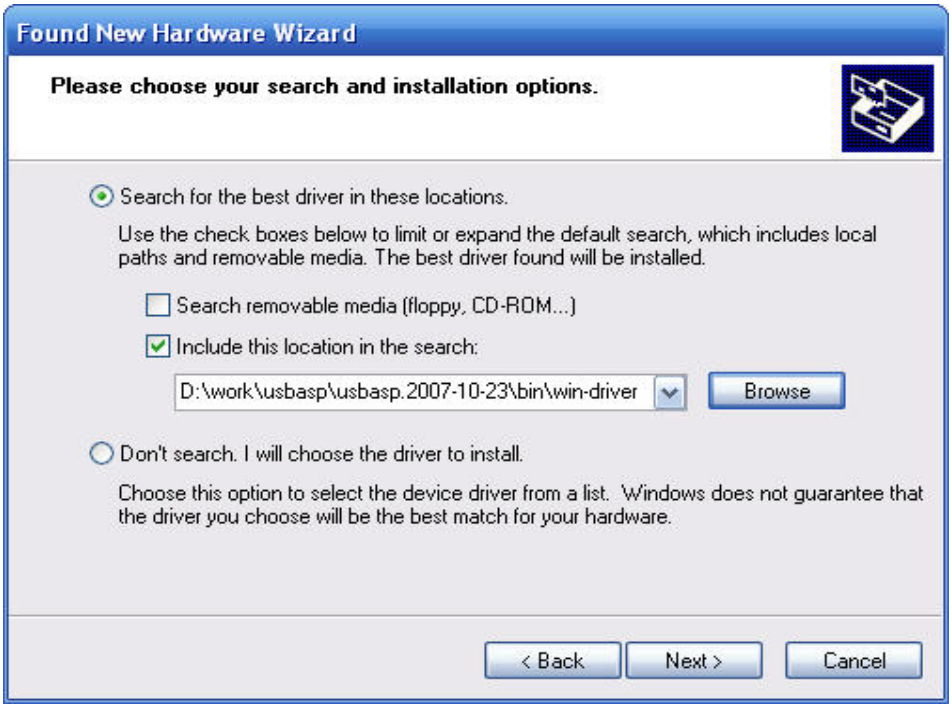
1. Connect USB cable to USBASP and connect cable directly to USB port of computer. (you must supply power to USBASP)
2. Wait for windows information “New Hardware Found USBASP”. If device isnt detected.

3. After device is detected Driver setup wizard opens. Select where USBASP driver is located. It is in directory you've downloaded with firmware. If you unpacked in C: drive, than driver should be in C:\usbasp.2007-10-23\bin\win-driver\ and press next.

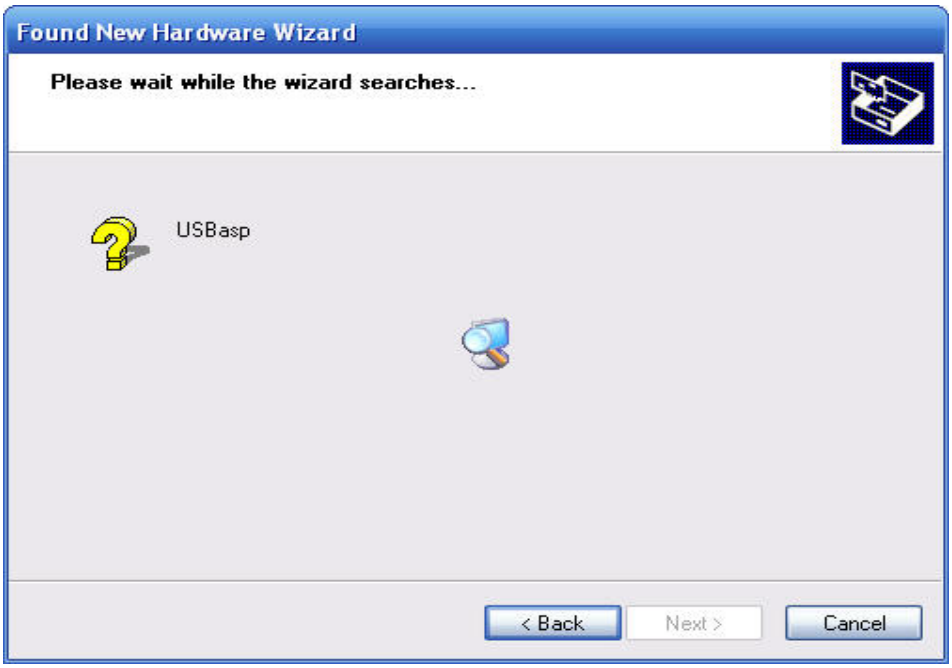
- Selec Install from a list or specific localtion (Advanced)



- Select localtion of a driver (C:\usbasp.2007-10-23\bin\win-driver\) and press Next

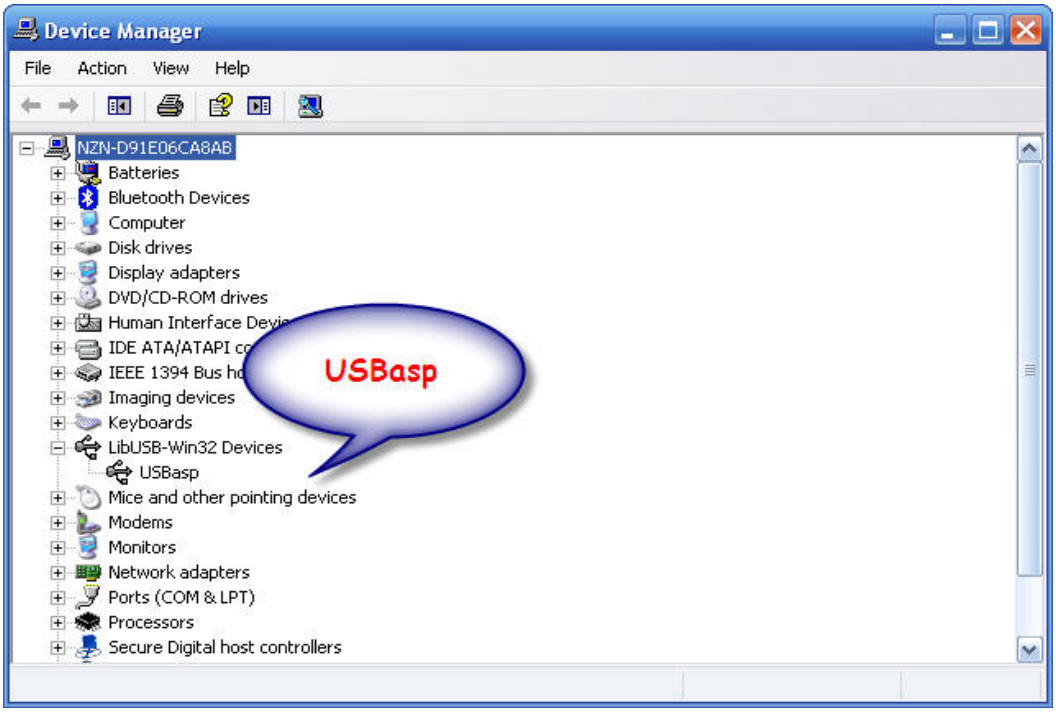


- Wait while installing



- When install completed, Press Finish button

4. After successful setup you should see following view in device list.



Using the programmer with AVRDUDE

AVRDUDE is a very popular command-line program for programming AVR chips. Have included and supported in WinAVR http://sourceforge.net/projects/winavr/

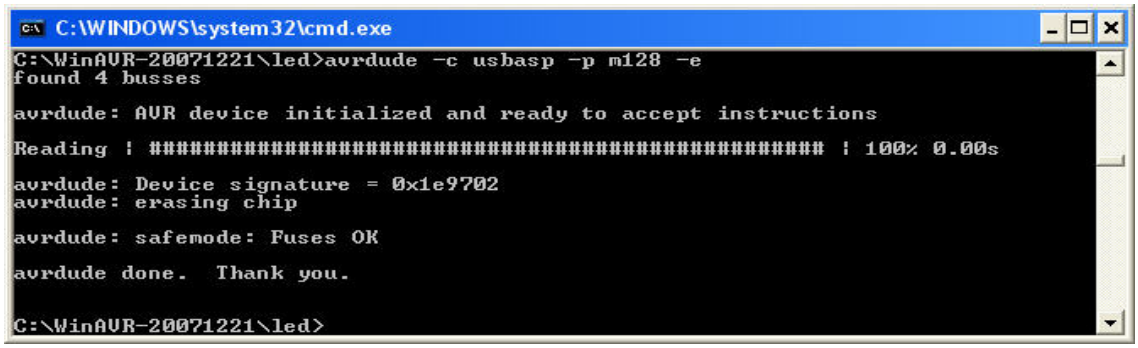
Examples:

1. Enter terminal mode with an AT90S2313 connected to the programmer:

   avrdude -c usbasp -p 2313 -t

2. Erase chip of an Atmega128:

   avrdude -c usbasp -p m128 -e



3. Write main.hex to the flash of an Atmega128:

   avrdude -c usbasp -p m128 -e -U flash:w:main.hex