



request	Multiple -U options are allowed, each
	is performed in the order specified.
-n	Do not write anything to the device.
-V	Do not verify.
-u	Disable safemode, default when running from
a script.	
-s	Silent safemode operation, will not ask you
if	
	fuses should be changed back.
-t	Enter terminal mode.
-E <exitspec>[,<exitspec>]	List programmer exit specifications.
-x <extended_param>	Pass <extended_param> to programmer.
-y	Count # erase cycles in EEPROM.
-Y <number>	Initialize erase cycle # in EEPROM.
-v	Verbose output. -v -v for more.
-q	Quell progress output. -q -q for less.
-l logfile	Use logfile rather than stderr for
diagnostics.	
-?	Display this usage.

```

avrdude version 6.1, URL: <http://savannah.nongnu.org/projects/avrdude/>
fablab@fablab-NB986:~$ lsusb
Bus 002 Device 002: ID 8087:8000 Intel Corp.
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 001 Device 002: ID 8087:8008 Intel Corp.
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 004 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 003 Device 003: ID 138a:0017 Validity Sensors, Inc.
Bus 003 Device 007: ID 03eb:2104 Atmel Corp. AVR ISP mkII
Bus 003 Device 008: ID 0403:6001 Future Technology Devices International,
Ltd FT232 USB-Serial (UART) IC
Bus 003 Device 005: ID 5986:0268 Acer, Inc
Bus 003 Device 004: ID 8087:07dc Intel Corp.
Bus 003 Device 006: ID 046d:c05a Logitech, Inc. M90/M100 Optical Mouse
Bus 003 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
fablab@fablab-NB986:~$ sudo nano /etc/udev/rules.d/usbtiny.rules
[sudo] password for fablab:
fablab@fablab-NB986:~$ sudo apt-get install uisp
E: No se pudo bloquear /var/lib/dpkg/lock - open (11: Recurso no
disponible temporalmente)
E: No se pudo bloquear el directorio de administración (/var/lib/dpkg/),
¿quizás haya algún otro proceso utilizándolo?
fablab@fablab-NB986:~$ cd /etc/udev/rules.d
fablab@fablab-NB986:/etc/udev/rules.d$ ls
60-raw1394.rules  70-persistent-net.rules  README
fablab@fablab-NB986:/etc/udev/rules.d$ sudo pico 60-avrisp.rules
fablab@fablab-NB986:/etc/udev/rules.d$ sudo service udev restart
udev stop/waiting
udev start/running, process 2871
fablab@fablab-NB986:/etc/udev/rules.d$ sudo pico 60-avrisp.rules
fablab@fablab-NB986:/etc/udev/rules.d$ cd
fablab@fablab-NB986:~$ ls
086-005      blink.o      eagle        Imágenes    Público     Vídeos

```

```
blink.c      Descargas    eagle-7.2.0  Música      pygestalt   wxGestalt
blink.hex    Documentos  Escritorio  Plantillas  sketchbook
fablab@fablab-NB986:~$ avrdude -p t44 -c avrisp2
avrdude: usb_open(): cannot read serial number "error sending control
message: Operation not permitted"
avrdude: usb_open(): cannot read product name "error sending control
message: Operation not permitted"
avrdude: usbdev_open(): WARNING: failed to set configuration 1: could not
set config 1: Operation not permitted
avrdude: usbdev_open(): error claiming interface 0: could not claim
interface 0: Operation not permitted
avrdude: usbdev_open(): no usable interface found
avrdude: usbdev_open(): did not find any USB device "usb" (0x03eb:0x2104)
```

avrdude done. Thank you.

```
fablab@fablab-NB986:~$ sudo avrdude -p t44 -c avrisp2
```

```
avrdude: stk500v2_command(): command failed
avrdude: stk500v2_program_enable(): bad AVRISPmkII connection status:
Unknown status 0x00
avrdude: initialization failed, rc=-1
      Double check connections and try again, or use -F to override
      this check.
```

avrdude done. Thank you.

```
fablab@fablab-NB986:~$ cd /etc/udev/rules.d
fablab@fablab-NB986:/etc/udev/rules.d$ ls
60-avrisp.rules  60-raw1394.rules  70-persistent-net.rules  README
fablab@fablab-NB986:/etc/udev/rules.d$ sudo pico 60-avrisp.rules
Use "fg" para volver a nano
```

```
[2]+  Detenido          sudo pico 60-avrisp.rules
fablab@fablab-NB986:/etc/udev/rules.d$ sudo pico 60-avrisp.rules
fablab@fablab-NB986:/etc/udev/rules.d$ sudo restart udev
udev start/running, process 2939
fablab@fablab-NB986:/etc/udev/rules.d$ sudo avrdude -p t44 -c avrisp2
```

```
avrdude: stk500v2_command(): command failed
avrdude: stk500v2_program_enable(): bad AVRISPmkII connection status:
Unknown status 0x00
avrdude: initialization failed, rc=-1
      Double check connections and try again, or use -F to override
      this check.
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ ls
60-avrisp.rules  60-raw1394.rules  70-persistent-net.rules  README
fablab@fablab-NB986:/etc/udev/rules.d$ ls -l
total 16
```

```
-rw-r--r-- 1 root root 387 abr 29 12:36 60-avrisp.rules
-rw-r--r-- 1 root root 134 ene 28 2010 60-raw1394.rules
-rw-r--r-- 1 root root 1009 ago 19 2014 70-persistent-net.rules
-rw-r--r-- 1 root root 1157 abr 14 2014 README
fablab@fablab-NB986:/etc/udev/rules.d$ sudo restart udev
udev start/running, process 2984
fablab@fablab-NB986:/etc/udev/rules.d$ sudo avrdude -p t44 -c avrisp2
```

```
avrdude: stk500v2_command(): command failed
avrdude: stk500v2_program_enable(): bad AVRISPMkII connection status:
Unknown status 0x00
avrdude: initialization failed, rc=-1
        Double check connections and try again, or use -F to override
        this check.
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ sudo avrdude -p t44 -c avrisp2 -F
```

```
avrdude: stk500v2_command(): command failed
avrdude: stk500v2_program_enable(): bad AVRISPMkII connection status:
Unknown status 0x00
avrdude: initialization failed, rc=-1
avrdude: AVR device initialized and ready to accept instructions
avrdude: Device signature = 0xc8a7b6
avrdude: Expected signature for ATtiny44 is 1E 92 07
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ sudo avrdude -p t44 -c avrisp2 -F
```

```
avrdude: stk500v2_command(): command failed
avrdude: stk500v2_program_enable(): bad AVRISPMkII connection status:
Unknown status 0x00
avrdude: initialization failed, rc=-1
avrdude: AVR device initialized and ready to accept instructions
avrdude: Device signature = 0xc8e750
avrdude: Expected signature for ATtiny44 is 1E 92 07
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ avrdude -p m2560 -c stk500v2 -P
/dev/ttyACM0 -b 115200 -e
avrdude: ser_open(): can't open device "/dev/ttyACM0": No such file or
directory
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ avrdude -p m2560 -c stk500v2 -P
/dev/ttyACM1 -b 115200 -e
avrdude: ser_open(): can't open device "/dev/ttyACM1": No such file or
directory
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ avrdude -p t44 -c avrisp2 -
Favrdude: usbdev_open(): did not find any USB device "usb"
(0x03eb:0x2104)
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ avrdude -p m2560 -c stk500v2 -P
/dev/ttyACM1 -b 115200 -e
avrdude: ser_open(): can't open device "/dev/ttyACM1": No such file or
directory
```

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ lsusb
Bus 002 Device 002: ID 8087:8000 Intel Corp.
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 001 Device 002: ID 8087:8008 Intel Corp.
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 004 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 003 Device 003: ID 138a:0017 Validity Sensors, Inc.
Bus 003 Device 009: ID 03eb:2104 Atmel Corp. AVR ISP mkII
Bus 003 Device 011: ID 0403:6001 Future Technology Devices International,
Ltd FT232 USB-Serial (UART) IC
Bus 003 Device 005: ID 5986:0268 Acer, Inc
Bus 003 Device 004: ID 8087:07dc Intel Corp.
Bus 003 Device 006: ID 046d:c05a Logitech, Inc. M90/M100 Optical Mouse
Bus 003 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
fablab@fablab-NB986:/etc/udev/rules.d$ sudo avrdude -p t44 -c avrisp2 -F
avrdude: AVR device initialized and ready to accept instructions
```

Reading | ##### | 100% 0.00s

avrdude: Device signature = 0x1e9207

avrdude: safemode: Fuses OK (E:FF, H:DF, L:62)

avrdude done. Thank you.

```
fablab@fablab-NB986:/etc/udev/rules.d$ cd
fablab@fablab-NB986:~$ ls
086-005    blink.o    eagle      Imágenes    Público     Videos
blink.c    Descargas  eagle-7.2.0 Música      pygestalt   wxGestalt
blink.hex  Documentos Escritorio  Plantillas  sketchbook
fablab@fablab-NB986:~$ sudo avrdude -p t44 -c avrisp2 -F -U
flash:w:blink.hex
```

avrdude: AVR device initialized and ready to accept instructions

Reading | ##### | 100% 0.00s

avrdude: Device signature = 0x1e9207

avrdude: NOTE: "flash" memory has been specified, an erase cycle will be performed

To disable this feature, specify the -D option.

avrdude: erasing chip

avrdude: reading input file "blink.hex"

avrdude: input file blink.hex auto detected as Intel Hex

avrdude: writing flash (1090 bytes):

Writing | ##### | 100% 0.38s

avrdude: 1090 bytes of flash written

avrdude: verifying flash memory against blink.hex:

avrdude: load data flash data from input file blink.hex:

avrdude: input file blink.hex auto detected as Intel Hex

avrdude: input file blink.hex contains 1090 bytes

avrdude: reading on-chip flash data:

Reading | ##### | 100% 0.34s

avrdude: verifying ...

avrdude: 1090 bytes of flash verified

avrdude: safemode: Fuses OK (E:FF, H:DF, L:62)

avrdude done. Thank you.

**fablab@fablab-NB986:~\$** ls

086-005	blink.o	eagle	Imágenes	Público	Videos
blink.c	Descargas	eagle-7.2.0	Música	pygestalt	wxGestalt
blink.hex	Documentos	Escritorio	Plantillas	sketchbook	

**fablab@fablab-NB986:~\$** sudo avrdude -p t44 -c avrisp2 -F

avrdude: AVR device initialized and ready to accept instructions

Reading | ##### | 100% 0.00s

avrdude: Device signature = 0x1e9207

avrdude: safemode: Fuses OK (E:FF, H:DF, L:62)

avrdude done. Thank you.

**fablab@fablab-NB986:~\$** sudo avrdude -p t44 -c avrisp2 -F

avrdude: stk500v2\_command(): command failed

avrdude: stk500v2\_program\_enable(): bad AVRISPMkII connection status:  
Unknown status 0x00

avrdude: initialization failed, rc=-1

avrdude: AVR device initialized and ready to accept instructions

avrdude: Device signature = 0xc817c5

avrdude: Expected signature for ATtiny44 is 1E 92 07

avrdude done. Thank you.

```
fablab@fablab-NB986:~$ sudo avrdude -p t44 -c avrisp2 -F
[sudo] password for fablab:
```

```
avrdude: AVR device initialized and ready to accept instructions
```

```
Reading | ##### | 100% 0.00s
```

```
avrdude: Device signature = 0x1e9207
```

```
avrdude: safemode: Fuses OK (E:FF, H:DF, L:62)
```

```
avrdude done. Thank you.
```

```
fablab@fablab-NB986:~$ sudo avrdude -p t44 -c avrisp2 -F -U
flash:w:blink.hex
```

```
avrdude: AVR device initialized and ready to accept instructions
```

```
Reading | ##### | 100% 0.00s
```

```
avrdude: Device signature = 0x1e9207
```

```
avrdude: NOTE: "flash" memory has been specified, an erase cycle will be
performed
```

```
    To disable this feature, specify the -D option.
```

```
avrdude: erasing chip
```

```
avrdude: reading input file "blink.hex"
```

```
avrdude: input file blink.hex auto detected as Intel Hex
```

```
avrdude: writing flash (1090 bytes):
```

```
Writing | ##### | 100% 0.38s
```

```
avrdude: 1090 bytes of flash written
```

```
avrdude: verifying flash memory against blink.hex:
```

```
avrdude: load data flash data from input file blink.hex:
```

```
avrdude: input file blink.hex auto detected as Intel Hex
```

```
avrdude: input file blink.hex contains 1090 bytes
```

```
avrdude: reading on-chip flash data:
```

```
Reading | ##### | 100% 0.34s
```

```
avrdude: verifying ...
```

```
avrdude: 1090 bytes of flash verified
```

```
avrdude: safemode: Fuses OK (E:FF, H:DF, L:62)
```

```
avrdude done. Thank you.
```

```
fablab@fablab-NB986:~$
```