

MMMC UIRUSB 1.0

User's Guide

Thank you for using Universal Infrared Receiver for USB. This receiver is ideal solution for remote control of applications under both Linux and Windows operating systems. This user's guide is simple description of setup.

Installation

Use mini USB type A cable to connect UIRUSB to any free USB port. It is using Full-Speed connection at 12 Mbps and is USB 2.0 compatible.

Status LED will be ON, if the device is powered, but not connected on USB bus and will flash when IR code is received.

Drivers

There are no special drivers needed for Linux OS, as the drivers are in the kernel. The device makes virtual serial port usually as `/dev/ttyACM0`.

Under Windows use drivers downloadable from www.mmmc.cz.

Setup

As UIRUSB makes virtual serial port, use any serial terminal software to configure it. In Linux you can use GtTerm, minicom or microcom. Under Windows use for example HyperTerminal.

Open the corresponding port and use keyboard to configure it. UIRUSB has two modes – operational and configuration. Press keys MMMC to unlock configuration mode. Then use these keys to configure:

- D – enable IR decoders
- C – disable IR decoders

H – enter HEX mode (received infrared codes are sent in hexadecimal format)
A – enter ASCII mode (received infrared codes are sent in readable ascii format)
R – returns OK to confirm it is functional
S – save configuration to internal flash
I – load configuration from internal flash

Then enter MMMC again to leave configuration mode.

While in configuration mode and ASCII mode press keys on your remote to read corresponding code, that can be used in various programs.

LIRC setup

Please refer to LIRC documentation on www.lirc.org to properly configure it. There are three files needed to configure LIRC:

/etc/lirc/hardware.conf – hardware configuration, enter those parameters:

```
DRIVER="irman"  
DEVICE="/dev/ttyACM0"
```

/etc/lirc/lircd.conf – remote control codes configuration, example setup:

```
begin remote  
  name      Philips  
  bits      24  
  eps       30  
  aeps      100  
  
  one       0      0  
  zero      0      0  
  pre_data_bits 40  
  pre_data   0xFFFFF524336  
  gap        107960  
  toggle_bit_mask 0x0  
  
  begin codes  
    KEY_1      0x100001  
    KEY_2      0x100002  
  end codes  
  
end remote
```

~/lircrc – application configuration, example control for mythtv:
begin

```
    prog = myhtv
    button = KEY_POWER
    config = Esc
    repeat = 0
end
```

To simple configuration of lircd.conf execute these command line:

```
irrecord -n -H irman -d /dev/ttyACM0 lircd.conf
```

Then follow on screen guide. Example configuration for LIRC and MythTV can be found on www.mmmmc.cz.

Other software

UIRUSB can be used also with other software, that is irman compatible, for example Girder, ARC2000, uICE, Intelliremote and others.

Specification

Connection:	USB 2.0 Full Speed 12 Mbps
Power consumption:	< 1W
USB Vendor/product ID:	04D8:F3E6
Windows version:	Windows XP, Vista, 7, 8.x
Linux version:	Kernel 2.16 up