

- [Build Mplayer on Debian](#)

?? kernel ?? ALSA

?? kernel-linux-sh4-2.6.23.17\_stm23\_A18B

? ALSA ?????? kernel(???)

? General seup ????????

CONFIG\_SOUND=y

#

# General setup

#

????

make ARCH=sh CROSS\_COMPILE=sh4-linux- vmlinux

Advanced Linux Sound Architecture (SND) [N/m/y/?] (NEW) y

Sequencer support (SND\_SEQUENCER) [N/m/y/?] (NEW) y

Sequencer dummy client (SND\_SEQ\_DUMMY) [N/m/y/?] (NEW) n

OSS Mixer API (SND\_MIXER\_OSS) [N/m/y/?] (NEW) y

OSS PCM (digital audio) API (SND\_PCM\_OSS) [N/m/y/?] (NEW) y

OSS PCM (digital audio) API - Include plugin system (SND\_PCM\_OSS\_PLUGINS) [Y/n/?] (NEW) y

OSS Sequencer API (SND\_SEQUENCER\_OSS) [N/y/?] (NEW) y

Dynamic device file minor numbers (SND\_DYNAMIC\_MINORS) [N/y/?] (NEW) n

Support old ALSA API (SND\_SUPPORT\_OLD\_API) [Y/n/?] (NEW) y

Verbose procfs contents (SND\_VERBOSE\_PROCFS) [Y/n/?] (NEW) y

Verbose printk (SND\_VERBOSE\_PRINTK) [N/y/?] (NEW) n

Debug (SND\_DEBUG) [N/y/?] (NEW) n

\*

\* Generic devices

\*

Dummy (/dev/null) soundcard (SND\_DUMMY) [N/m/y/?] (NEW) n

Virtual MIDI soundcard (SND\_VIRMIDI) [N/m/y/?] (NEW) n

MOTU MidiTimePiece AV multiport MIDI (SND\_MTPAV) [N/m/y/?] (NEW) n

UART16550 serial MIDI driver (SND\_SERIAL\_U16550) [N/m/y/?] (NEW) n

Generic MPU-401 UART driver (SND\_MPU401) [N/m/y/?] (NEW) n

\*

\* USB devices

\*

USB Audio/MIDI driver (SND\_USB\_AUDIO) [N/m/y/?] (NEW) y

Native Instruments USB audio devices (SND\_USB\_CAIAQ) [N/m/y/?] (NEW) n

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\* System on Chip audio support

\*

ALSA for SoC audio support (SND\_SOC) [N/m/y/?] (NEW) n

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\* STMicroelectronics SoCs support

\*

STMicroelectronics SoCs support (SND\_STM) [N/m/y/?] (NEW) n

\*

\* Open Sound System

\*

Open Sound System (DEPRECATED) (SOUND\_PRIME) [N/m/y/?] (NEW) n

sh4-linux-objcopy -O binary vmlinux vmlinux.bin

gzip --best --force vmlinux.bin

mkimage -A sh -O linux -T kernel -C gzip -a 0x80800000 -e 0x80801000 -n "Linux 2.6" -d vmlinux.bin.gz

vmlinux.ub

?? kernel-linux-sh4-2.6.32.59\_stm24\_0211

make ARCH=sh CROSS\_COMPILE=sh4-linux- pdk7105\_defconfig

make ARCH=sh CROSS\_COMPILE=sh4-linux- menuconfig

General setup

-> Device Drivers

--> Sound card support

---> Advanced Linux Sound Architecture

----> Sequencer support [y]

----> OSS Mixer API [y]

----> OSS PCM (digital audio) API [y]

----> OSS Sequencer API [y]

----> Support old ALSA API [y]

----> Verbose procfs contents [y]

----> USB sound devices

----> USB Audio/MIDI driver [y]

make ARCH=sh CROSS\_COMPILE=sh4-linux- vmlinux

**MPlayer ??(Audio Mixing)**

?? MPlayer ??????????????????

1. ??? ALSA ??????OSS ????
2. MPlayer ?????? alsa ?????? mplayer ?????? alsa???  
#mplayer -ao help
3. MPlayer ??????  
???? #mplayer -ao alsa -cache 256 .....  
???? #mplayer -ao alsa:device=hw=0.0 .....

4. ?????????????????????  
 ?? /etc/asound.conf

```
pcm.!default {
  type plug
  slave.pcm {
    type dmix
    ipc_key 1024
    slave {
      pcm "hw:0,0"
      rate 44100
    }
  }
}
```

TIPS:

????????(NextRadio v2+)????? rate 44100????????????????????

?????

- <http://mpd.wikia.com/wiki/Tuning>
- <http://alsa.opensrc.org/Dmix>

### **lircrc for Mplayer**

/etc/lirc/lircrc

```
begin
  button = mute
  prog = mplayer
  config = mute
  repeat = 0
end
begin
  button = power
  prog = mplayer
  config = quit
  repeat = 2
end
begin
  button = chUp
  prog = mplayer
  config = pt_step -1
  repeat = 0
end
begin
  button = chUp_V2
```

```

    prog = mplayer
    config = pt_step -1
    repeat = 0
end
begin
    button = chDown
    prog = mplayer
    config = pt_step 1
    repeat = 0
end
begin
    button = chDown_V2
    prog = mplayer
    config = pt_step 1
    repeat = 0
end
begin
    button = volUp
    prog = mplayer
    config = volume 47
    repeat = 0
end
begin
    button = volUp_V2
    prog = mplayer
    config = volume 47
    repeat = 0
end
begin
    button = volDown
    prog = mplayer
    config = volume -47
    repeat = 0
end
begin
    button = volDown_V2
    prog = mplayer
    config = volume -47
    repeat = 0
end

```

????????

```

# irw
00000000ce94c43b 00 right_V2 /etc/lirc/lircd.conf
00000000ce9404fb 00 up_V2 /etc/lirc/lircd.conf
00000000ce9404fb 01 up_V2 /etc/lirc/lircd.conf
00000000ce9404fb 00 up_V2 /etc/lirc/lircd.conf
00000000ce94847b 00 down_V2 /etc/lirc/lircd.conf

```

**Debian 5.0 ?? MPD**

```
apt-get install wget build-essential libglib2.0-dev  
apt-get install libasound2-dev libmms-dev libshout3-dev libmpcdec-dev libao-dev
```

```
wget http://downloads.sourceforge.net/project/musicpd/mpd/0.17.3/  
mpd-0.17.3.tar.bz2?r=http%3A%2F%2Fmpd.wikia.com%2Fwiki%2FServer&ts=1365082963&use_mirror=nchc  
-O mpd-0.17.3.tar.bz2  
tar xjf mpd-0.17.3.tar.bz2  
cd mpd-0.17.3  
./configure --prefix=/opt/mpd  
make  
make install
```

**???? MPD**

```
?? mpd-0.17.3.tar.bz2
```

- <http://sourceforge.net/projects/musicpd/>
- <http://mpd.wikia.com/wiki/Git>

```
????
```

```
tar xjf mpd-0.17.3.tar.bz2  
cd mpd-0.17.3/
```

```
?????
```

- [HiRadio ???](#)