



# Remote Controller Support

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## Previous Situation - Problems

- A minimum input/event set of functions used by V4L drivers
- DVB using a different support and no pure IR driver
- Most card tables were bound to just one protocol
- Keycode tables on V4L were masked to up to 255 bits
- Incoherent support among the drivers
- Lirc is the most used IR userspace application, but kernel patches were out of the Kernel tree

# Current Situation

- A Remote Controller subsystem were created;
- Drivers register on it on a similar way as they would do if they were registering on input/event;
- V4L drivers already using it;
- Two new RC-only drivers got submitted/committed;
- Lirc patches under discussion for 2.6.36 merge;
- Supports raw decode of the most used IR protocols;
- RC keytables converted into one file per table;

# Future planned enhancements

- Migration of DVB drivers and RC HID drivers;
- Merge of Lirc API (raw IR events) into Kernel core;
- Merge of other RC-only drivers that are being converted from Lirc tree;
- Add support for Bluetooth/USB RC only drivers;
- Finish the rc-keytable userspace application (at v4l-utils tree) to allow it to auto-load a RC key via udev;
- IR TX support.

# Remote Controller x Embedded systems

- For sure some embedded hardware provide some sort of IR support (TV sets, mobiles with IR TX, STB's);
- No patch/discussion were done before in order to get feedback;
- Issues that deserve discussions:
  - RC keymaps in kernel - should we need it?
  - IR TX (IR blaster) interface
  - What else is needed to get contributions from Embedded people?



# Remote Controller



## Discussions

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# Reference Applications

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# Applications for regression test

- There are some test/compliance tools at v4l-utils
  - Incomplete;
  - May hide real case troubles
- Need a basic set of “officially supported” applications:
  - xawtv3, mplayer, tvtime, qv4l2, gnome-lirc, alevt, gstream gst
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