

KERNEL LABS TV TUNER DRIVER

Summary

The Kernel Labs TV Tuner driver is designed to provide a highquality solution for existing TV tuner products. A specific emphasis is given on supporting commercial embedded applications including fitness equipment, healthcare solutions, and digital signage.

Leveraging our extensive experience writing Linux TV drivers (both open source drivers and commercial), the product seeks to take into account the specific needs of commercial organizations as opposed to casual end-user TV watching. Thus a focus has been placed on ease-of-installation, providing reliable and consistent builds, supporting multiple kernels/platforms, and actively working to ensure interoperability with the common media toolkits used by integrators to provide support for TV reception and display in their equipment.

Tools and integration services are available to ease the integration of any of the tuners into existing products.

Features:

- Supported on Linux x86/x86-64 with kernels 3.2+
- Support for over-the-air ATSC and ClearQAM 64/256
- Support for analog NTSC closed captions (EIA-608)
- Easy to compile against existing LinuxTV media_build trees
- Technical support included in the license cost
- Optimized for low digital tuning time, fast channel changing
- Compliant with the V4L2 and Linux-DVB API specifications
- Advanced statistics for signal quality and QAM constellation display

Application Compatibility:

- tvtime (analog)
- VLC (analog, digital)
- Xine (digital)
- LinuxTV command line tools (v4l2-ctl/azap/scan/w_scan)
- gStreamer 0.10 and 1.0

Supported Devices:



Specifications:

Analog video capture:

- Television standards: NTSC OTA and analog cable
- Video format: YUV 4:2:2 UYVY uncompressed video (16bpp)
- Video resolution: 720x480 pixels
- Audio format: 48 KHz stereo PCM audio
- VBI format: unsliced raw VBI waveform (720 samples/line)

Digital video capture:

- Television standards: ATSC: 8VSB. Cable: QAM64, QAM256
- Stream format: MPEG2 with AC3 audio
- USB bandwidth: Maximum 19.2 Mbit/sec for ATSC, 38.4 Mbit/sec for QAM256

System Requirements:

- USB 2.0 port (for USB based products)
- Full length miniPCIe slot (for MC878U product)
- Ubuntu 12.04 LTS or higher (both x86 and x86-64 supported)

Availability:

- Currently shipping
- Site licenses available
- Per-unit licenses available

Product		HVR-955Q	H837	HU419	MC878U	H377
Vendor		Hauppauge	AVerMedia	MaxMediaTek	MaxMediaTek	AVerMedia
Digital Standards	ATSC	٠	٠	٠	٠	
	ClearQAM	٠	٠	٠	٥	
	DVB-T2					٠
	DVB-T					٠
	DVB-C					٠
NTSC Analog		٠	٠	٠	٠	
Physical	Form Factor	USB	USB	USB	MiniPCIe	MiniPCle
	Tuner	Hybrid	Hybrid	Hybrid	Hybrid	Digital