NAME
  hkbd - HID keyboard driver

SYNOPSIS
  To compile this driver into the kernel, place the following line in your kernel configuration file:

  device hkbd
  device hid
  device hidbus
  device evdev
  options EVDEV_SUPPORT

  Alternatively, to load the driver as a module at boot time, place the following line in loader.conf(5):

  hkbd_load="YES"

DESCRIPTION
  The **hkbd** driver provides support for keyboards that attach to the HID transport backend. hid(4), hidbus(4), and one of iichid(4) or usbhid(4) must be configured in the kernel as well.

CONFIGURATION
  By default, the keyboard subsystem does not create the appropriate devices yet. Make sure you reconfigure your kernel with the following option in the kernel config file:

  options KBD_INSTALL_CDEV

  If both an AT keyboard HID keyboards are used at the same time, the AT keyboard will appear as *kbd0* in */dev*. The HID keyboards will be *kbd1*, *kbd2*, etc. You can see some information about the keyboard with the following command:

  kbdcontrol -i < /dev/kbd1

  or load a keymap with

  kbdcontrol -l keymaps/pt.iso < /dev/kbd1

  See kbdcontrol(1) for more possible options.

  You can swap console keyboards by using the command

kbdcontrol -k /dev/kbd1

From this point on, the first HID keyboard will be the keyboard to be used by the console.

If you want to use a HID keyboard as your default and not use an AT keyboard at all, you will have to remove the **device atkbd** line from the kernel configuration file. Because of the device initialization order, the HID keyboard will be detected *after* the console driver initializes itself and you have to explicitly tell the console driver to use the existence of the HID keyboard. This can be done in one of the following two ways.

Run the following command as a part of system initialization:

kbdcontrol -k /dev/kbd0 < /dev/ttyv0 > /dev/null

(Note that as the HID keyboard is the only keyboard, it is accessed as */dev/kbd0*) or otherwise tell the console driver to periodically look for a keyboard by setting a flag in the kernel configuration file:

device sc0 at isa? flags 0x100

With the above flag, the console driver will try to detect any keyboard in the system if it did not detect one while it was initialized at boot time.

DRIVER CONFIGURATION
> **options KBD_INSTALL_CDEV**

Make the keyboards available through a character device in */dev*.

> **options HKBD_DFLT_KEYMAP**
> **makeoptions HKBD_DFLT_KEYMAP=fr.iso**

The above lines will put the French ISO keymap in the ukbd driver. You can specify any keymap in */usr/share/syscons/keymaps* or */usr/share/vt/keymaps* (depending on the console driver being used) with this option.

> **options KBD_DISABLE_KEYMAP_LOADING**

Do not allow the user to change the keymap. Note that these options also affect the AT keyboard driver, atkbd(4).

SYSCTL VARIABLES

The following variables are available as both sysctl(8) variables and loader(8) tunables:

hw.hid.hkbd.debug
        Debug output level, where 0 is debugging disabled and larger values increase debug message verbosity. Default is 0.

FILES
/dev/kbd   blocking device nodes
/dev/input/event input event device nodes.

EXAMPLES
   device hkbd

Add the **hkbd** driver to the kernel.

SEE ALSO
kbdcontrol(1), hid(4), hidbus(4), iichid(4), syscons(4), usbhid(4), vt(4), config(8)

AUTHORS
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