

Fedora 12 & the Dvico Dual Digital 4 Rev 2 Remote Howto

The procedure assumes the user mythtv has been created and has been given sudo privileges.



*DViCO
FusionREMOTE v2*

1) Create `/usr/share/hal/fdi/preprobe/20thirdparty/remote.fdi` to stop remote key-presses being interpreted as keyboard presses. Add the following match xml element.

```
<?xml version="1.0" encoding="UTF-8"?>

<!--
  This file must reside in:

  /usr/share/hal/fdi/preprobe/20thirdparty

  It will cause HAL ignore the remote control event device, which will allow LIRC to
  capture it
-->

<deviceinfo version="0.2">

<device>
  <match key="input.product" contains_ncase="IR- receiver inside an USB DVB
receiver">
    <merge key="info.ignore" type="bool">true</merge>
  </match>
  <match key="info.product" contains_ncase="IR- receiver inside an USB DVB receiver">
    <merge key="info.ignore" type="bool">true</merge>
  </match>
</device>

</deviceinfo>
```

2) For linux to select the right event on powerup create a symlink to the correct input device using the following UDEV rule:

create file: `/etc/udev/rules.d/10-local.rules`

```
# This rule is for the Dvico Dual Digital 4 Rev 2. It has 2 IR modules
# identified, only the first of which is connected to the receiver.
# The KERNELS=="*-1" part of this rule makes sure that the first
# device is the one that gets the symlink.
KERNEL=="event*", \
    KERNELS=="*-1", \
    ATTRS{manufacturer}=="Dvico", \
    ATTRS{idVendor}=="0fe9", \
    ATTRS{idProduct}=="db98", \
    SYMLINK="input/irremote"
```

Test this by rebooting & doing a `sudo cat /dev/input/irremote`
This should display binary codes for all key presses.

3) Edit /etc/sysconfig/lirc (this is the hardware.conf in ubuntu) to go through the irremote symlink.

```
# Note: in addition to these parameters, you need to have working -- sh --
# configuration file for lircd (and lircmd if enabled).

# Options to lircd(8). Typically, this will be empty, as which driver to use
# should be specified using the LIRC_DRIVER variable below.
LIRCD_OPTIONS=""

# The infrared receiver (and/or transmitter) driver to be used by lircd(8),
# similar to passing "-H driver" to lircd(8).
# Run "/usr/sbin/lircd -H help" to get a listing of supported drivers.
LIRC_DRIVER="devinput"

# Which lirc device will be used by lircd(8).
# This is the same as passing "-d device" to lircd.
# An empty value will use the default /dev/lirc0 device.
LIRC_DEVICE="/dev/input/irremote"

# If "yes", the init script will try to start lircmd(8) too.
ENABLE_LIRCMD="no"

# Options to lircmd(8).
LIRCMD_OPTIONS=""
```

4) Save the lircd.conf file in /etc/lirc To record lircd.conf

```
type "sudo irrecord --driver=devinput --device=/dev/input/irremote lircd.conf "
```

Save the matching lircrc file in /home/mythtv/.mythtv/lircrc

5) Run irw and press a few keys on the remote. You should see the names you gave the keys appearing.

6) Make your TV button shutdown the PC

Taken from the FedoraMyth Tips and Tricks Section. To enable an orderly shutdown using your remote first you must enable irexec to run in the background. This is simply done using the command:

```
irexec -d
```

Put this into System -> Preferences -> Startup Applications along with `mythfrontend` to automatically start mythtv.

The default config file for irexec is `~/lircrc` in the users home directory so you need to create a link .

cd to /home/mythtv

```
In -s /home/mythtv/.mythtv/lircrc .lircrc
```

When irexec is autostarted at login, in this case by a user, it doesn't have a tty terminal value. Check out your "ps aux | grep ir" above. Sudo doesn't like to be told what to do from something that doesn't apparently come from a terminal, and since irexec is the program actually executing your script, which is sudo'd, sudo won't run.

Edit your sudoers file and comment out the following line.

```
#Defaults    requiretty
```

Now we need to create a mythtvbutton.sh script in your /usr/local/bin to shutdown the PC (but only if mythfrontend is not running - we don't want to shutdown accidentally).

```
/usr/local/bin/mythtvbutton.sh
```

```
#!/bin/bash
PROG=mythfrontend
STATUS=`ps -e | grep $PROG | grep -v grep | wc -l | awk '{print $1}'`

if [ `echo $DISPLAY | grep -c ":0"` -ge 1 ]
then
    if [ $STATUS -eq 0 ]
    then
        sudo /sbin/shutdown -h now
    fi
fi
exit 0
```

Make it executable:

```
sudo chmod +x /usr/local/bin/mythtvbutton.sh
```

Next edit your ~/.lircrc file to bind your TV button. Add the following lines:

```
# TV Button
begin
    prog = irexec
    button = tv
    config = /usr/local/bin/mythtvbutton.sh
end
```

Now restart you PC and it should start mythtv automatically.

When you have exited mythtv you can press your TV button and your PC should shutdown.

lircd.conf

```
# brand: DViCO
# remote control: DViCO FusionHDTV DVB-T Dual Digital 4 Rev 2

begin remote

    name DViCO_Dual_Digital4
    bits 16
    eps 30
    aepe 100

    one 0 0
    zero 0 0
    pre_data_bits 16
    pre_data 0x1
    gap 199981
    toggle_bit_mask 0x16000000

begin codes

    tv 0x0164
    pc 0x0074
    dtv 0x0179
    mp3 0x0187
    dvd 0x0185
    profile 0x016C
    1 0x0002
    2 0x0003
    3 0x0004
    4 0x0005
    5 0x0006
    6 0x0007
    7 0x0008
    8 0x0009
    9 0x000A
    0 0x000B
    setup 0x008D
    guide 0x016D
    replay 0x00A5
    skip 0x00A3
    up 0x0067
    down 0x006C
    left 0x0069
    right 0x006A
    ok 0x0160
    vol+ 0x0073
    vol- 0x0072
    ch+ 0x0192
    ch- 0x0193
    start 0x001C
    mute 0x0071
    open 0x0086
    input 0x0166
    livetv 0x0182
    back 0x009E
    ratio 0x0173
    snapshot 0x00D4
    dvdmenu 0x008B
```

```

        screen          0x0174
        alttab          0x000F
        rec              0x00A7
        play            0x00A4
        stop            0x0080
        rew             0x00A8
        ff              0x00D0
    end codes
end remote

```

lircrc

<pre> # Start of General Bindings begin prog = irexec button = tv config = /usr/local/bin/mythtvbutton.sh end begin prog = mythtv button = pc config = Esc #End of General Bindings # Start of MythTV key bindings. # Top Buttons begin prog = mythtv button = dtv config = Alt+P end begin prog = mythtv button = mp3 config = Alt+8 end begin prog = mythtv button = dvd config = Alt+D end begin prog = mythtv button = profile config = end # Numbers begin prog = mythtv button = 0 config = 0 end begin prog = mythtv button = 1 config = 1 end begin prog = mythtv button = 2 config = 2 </pre>	<pre> # Start of VLC bindings. begin prog = vlc button = play config = key-play-pause end begin prog = vlc button = stop config = key-stop end begin prog = vlc button = ff config = key-faster end begin prog = vlc button = rew config = key-slower end begin prog = vlc button = screen config = key-fullscreen end begin prog = vlc button = right config = key-nav-right end begin prog = vlc button = left config = key-nav-left end begin prog = vlc button = up config = key-nav-up end begin prog = vlc button = down config = key-nav-down end begin prog = vlc button = ok config = key-nav-activate end </pre>
--	--

```

end
begin
    prog = mythtv
    button = 3
    config = 3
end
begin
    prog = mythtv
    button = 4
    config = 4
end
begin
    prog = mythtv
    button = 5
    config = 5
end
begin
    prog = mythtv
    button = 6
    config = 6
end
begin
    prog = mythtv
    button = 7
    config = 7
end
begin
    prog = mythtv
    button = 8
    config = 8
end
begin
    prog = mythtv
    button = 9
    config = 9
end

#Setup, Guide, Replay, Skip, D-Pad, OK,
Vol, Start, Ch
begin
    prog = mythtv
    button = setup
    config = M
end
begin
    prog = mythtv
    button = guide
    config = S
end
begin
    prog = mythtv
    button = replay
    config = Left
end
begin
    prog = mythtv
    button = skip
    config = Right
end
begin
    prog = mythtv
    button = up
    config = Up
end

begin
    prog = vlc
    button = vol+
    config = key- vol- up
end
begin
    prog = vlc
    button = vol-
    config = key- vol- down
end
begin
    prog = vlc
    button = mute
    config = key- vol- mute
end
begin
    prog = vlc
    button = dvdmenu
    config = key- disc- menu
end
begin
    prog = vlc
    button = snapshot
    config = key- snapshot
end
begin
    prog = vlc
    button = ratio
    config = key- aspect- ratio
end
begin
    prog = vlc
    button = skip
    config = key- jump+short
end
begin
    prog = vlc
    button = replay
    config = key- jump- short
end
begin
    prog = vlc
    button = setup
    config = key- intf- show
end

# End of VLC bindings.

```

```
begin
    prog = mythtv
    button = left
    config = Left
end
begin
    prog = mythtv
    button = ok
    config = Space
end
begin
    prog = mythtv
    button = right
    config = Right
end
begin
    prog = mythtv
    button = down
    config = Down
end
begin
    prog = mythtv
    button = vol+
    config = F11
end
begin
    prog = mythtv
    button = vol-
    config = F10
end
begin
    prog = mythtv
    button = start
    config = M
end
begin
    prog = mythtv
    button = ch+
    config = Up
end
begin
    prog = mythtv
    button = ch-
    config = Down
end

#Bottom Buttons
begin
    prog = mythtv
    button = mute
    config = F9
end
begin
    prog = mythtv
    button = open
    config = S
end
begin
    prog = mythtv
    button = play
    config = P
end
begin
    prog = mythtv
```

```

    button = Stop
    config = Esc
end
begin
    prog = mythtv
    button = input
    config = C
end
begin
    prog = mythtv
    button = livetv
    config = V
end
begin
    prog = mythtv
    button = rew
    config = <
end
begin
    prog = mythtv
    button = ff
    config = >
end
begin
    prog = mythtv
    button = back
    config = Esc
end
begin
    prog = mythtv
    button = ratio
    config = W
end
begin
    prog = mythtv
    button = screen
    config = B
end
begin
    prog = mythtv
    button = alttab
    config = N
end
begin
    prog = mythtv
    button = snapshot
    config = Y
end
begin
    prog = mythtv
    button = dvdmenu
    config = Alt+Q
end
begin
    prog = mythtv
    button = rec
    config = R
end
# End of MythTV key bindings.

```

Note: The lircrc is a continuous file – append the vlc bindings to the end of the MythTV bindings.