

Hardware:

- **Raspberry Pi 3 Modell B+**
- **5 inch LCD 800*480 Resistive Touch Screen Display HDMI interface (Waveshare)**

load piCore Player image (to the time of writing 4.0.0 – 01.09.2018) here

https://www.picoreplayer.org/main_downloads.shtml

1.) Load Win32 Disk Imager

<https://sourceforge.net/projects/win32diskimager/>

2.) Write image to microSD card



3.) Start Raspberry PI with monitor mounted (or connected by USB) and card inserted and connected to LAN.

It's IP can be read on screen e.g. eth0 IP: 192.168.0.100

4.) Enter IP in browser and switch in “Main Page” to “Advances”



5.) Go to “Tweaks” and install “Jivelite” – eventually you have to expand the disk – just follow the instructions on the screen.
- Reboot system

6.) To get rid of the display fault and activate the touch ability:

Open SSH connection in putty or other ssh terminal
default user: tc
default password: piCore

Mount boot partition for editing config.txt

```
mount /mnt/mmcblk0p1
```

```
cd /mnt/mmcblk0p1
```

```
vi config.txt
```

scroll to the end of the document and enter (by pressing “I”) the following lines
between

```
#---Begin-Custom-(Do not alter Begin or End Tags)-----
```

and

```
#---End-Custom-----
```

```
hdmi_group=2
```

```
hdmi_mode=87
```

```
hdmi_cvt 800 480 60 6 0 0 0
```

```
hdmi_drive=1
```

```
dtoverlay=ads7846,cs=1,penirq=25,penirq_pull=2,speed=50000,keep_vref_on=0,swapxy=0,pmax=255,  
xohms=150,xmin=200,xmax=3900,ymin=200,ymax=3900
```

press:

esc

:wq (followed by enter)

```
sudo filetool.sh -b
```

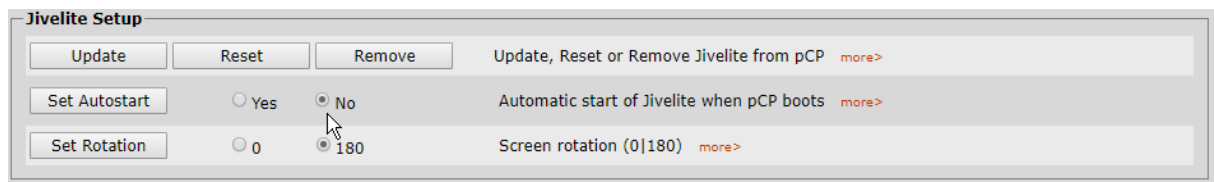
to save to sd card (don't know if this is really necessary)

```
sudo reboot
```

to restart system

7.) Calibrate touch screen

- go to ipCorePlayer web interface
- disable "jivelite" autostart under "Tweaks"
- press "Set Autostart" to save settings



- reboot system
- ssh into device and run:

```
cat /proc/bus/input/devices
```
- note the device name (in this case **ADS7846 Touchscreen**)
- note the event number (in this case **event0**)

```
tc@T03-Buero:~$ cat /proc/bus/input/devices
I: Bus=0000 Vendor=0000 Product=0000 Version=0000
N: Name="ADS7846 Touchscreen"
P: Phys=spi0.1/input0
S: Sysfs=/devices/platform/soc/3f204000.spi/spi_master/spi0/spi0.1/input/input0
U: Uniq=
H: Handlers=mouse0 event0
B: PROP=0
B: EV=b
B: KEY=400 0 0 0 0 0 0 0 0 0 0
B: ABS=1000003
```

```
sudo TSLIB_FBDEVICE=/dev/fb0 TSLIB_TSDEVICE=/dev/input/event0 /usr/local/bin/ts_calibrate
```

if necessary replace event0 with the event number you noted above

follow instructions on screen

```
sudo TSLIB_FBDEVICE=/dev/fb0 TSLIB_TSDEVICE=/dev/input/event0 /usr/local/bin/ts_test
```

if necessary replace event0 with the event number you noted above

to check if it works

8.) bring up “Jivelite” by entering

```
sudo SDL_VIDEODRIVER=fbcon SDL_FBDEV=/dev/fb0 TSLIB_TSDEVICE=/dev/input/event0  
SDL_MOUSEDRV=TSLIB /opt/jivelite/bin/jivelite
```

if necessary, replace event0 with the event number you noted above

and check if everything is working as desired

9.) kill process with strg+c (ctrl+c)

10.) make settings persistent

```
sudo vi /home/tc/www/cgi-bin/pcp_startup.sh
```

change (line 707 – in piCorePlayer 4.1 line 739)

```
eventno=$( cat /proc/bus/input/devices | awk '/FT5406 memory based  
driver/{for(a=0;a<=0;a++){getline;if(/mouse/==1){ print $NF;exit 0;}}}')
```

to

```
eventno=$( cat /proc/bus/input/devices | awk '/ADS7846  
Touchscreen/{for(a=0;a<=0;a++){getline;if(/mouse/==1){ print $NF;exit 0;}}}')
```

if necessary, replace ADS7846 Touchscreen with the device name you noted above

press:
esc
:wq (followed by enter)

11.) go back to webinterface

- enable "jivelite" autostart under "Tweaks"
- press "Set Autostart" to save settings
- reboot system

If you still see the mouse pointer your device name is wrong – double check with

```
cat /proc/bus/input/devices
```

ENJOY!