PIXCIR

Android UI TangoC V1.4.4

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Abstact

This procedure is based on the pixcir driver development, it integrates the two functions calibrate and bootloader, Devices require the user to modify the device can read and write permissions. The default device pathname is "/dev/pixcir_i2c_ts0", bootloader file pathname is "/sdcard/boot.pix", make sure you keep the same pathname, Otherwise, the program can not run. The program supports command mode debugging.

1. Modify device permission
1> Manually modify the permissions
ls -l /dev/pix*

crw-------   1 0   0   125, 0 Feb 1 13:59 /dev/pixcir_i2c_ts0

chmod 666 /dev/pixcir_i2c_ts0
ls -l /dev/pix*

crw-rw-rw-   1 0   0   125, 0 Feb 1 13:59 /dev/pixcir_i2c_ts0
#

2> Android2.1 modify equipment for reference
modify the system file /system/core/init/devices.c, such as:
…
```
static struct perms_ devperms[] = {
{ "/dev/null",      0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/zero",      0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/full",      0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/ptmx",      0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/tty",       0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/random",    0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/urandom"    0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/ashmem",    0666,  AID_ROOT,      AID_ROOT,     0 },
{ "/dev/binder",    0666,  AID_ROOT,      AID_ROOT,     0 },
 …
```

add this line:
{ "/dev/pixcir_i2c_ts0",   0666, AID_ROOT,   AID_ROOT, 0 },

Recompile the file system, the system can be downloaded to make development board. In a terminal view, such as:

ls -l /dev/pix*
crw-rw-rw- root root 125, 0 2000-02-12 23:28 pixcir_i2c_ts0
#

3> put filesystem, copy TangoC.apk to "system/app" directory.

2. Install TangoC.apk
1> adb install
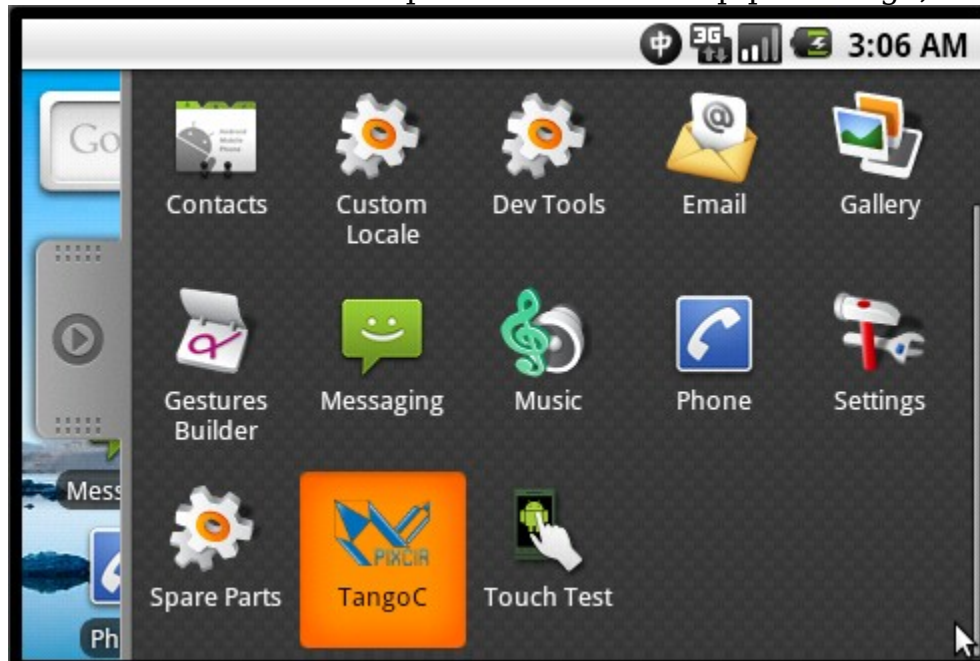Give the I2cTool.apk copy to the specified directory , then enter into the directory,

as follows:
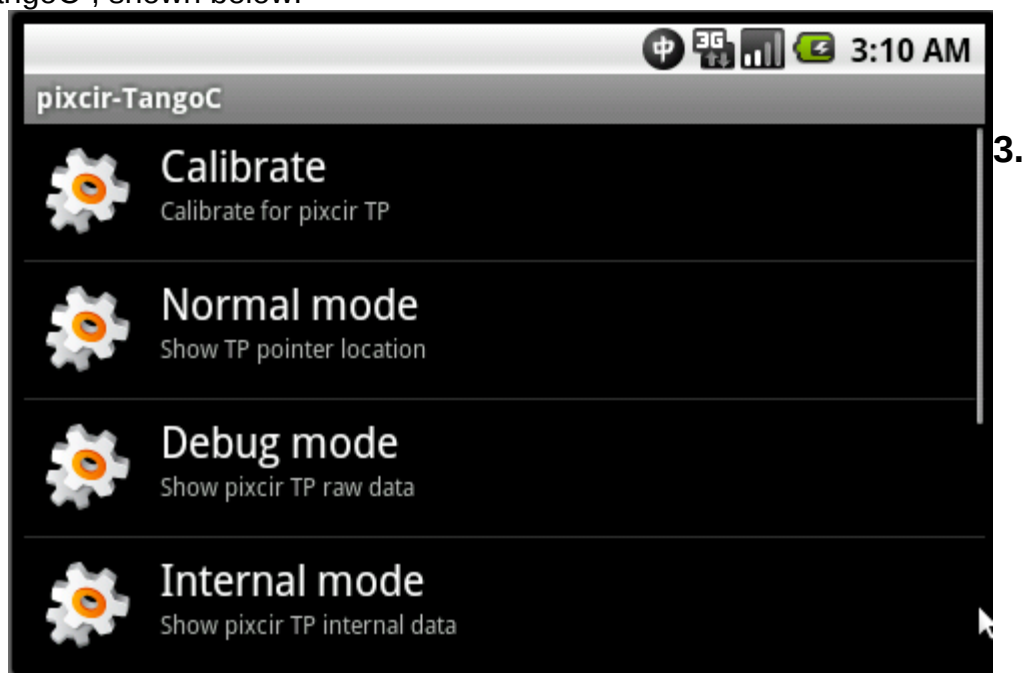pixcir@pixcir-desktop:~$ cd ./workspace/Android/I2cTool/bin/
pixcir@pixcir-desktop:~/workspace/Android/TangoC/bin$ adb install ./TangoC.apk

 2> sdcard install
 Give the TangoC.apk copy to root, then click TangoC.apk, follow the wizard
to install. After installation is complete on the desktop pixcir logo, such as:
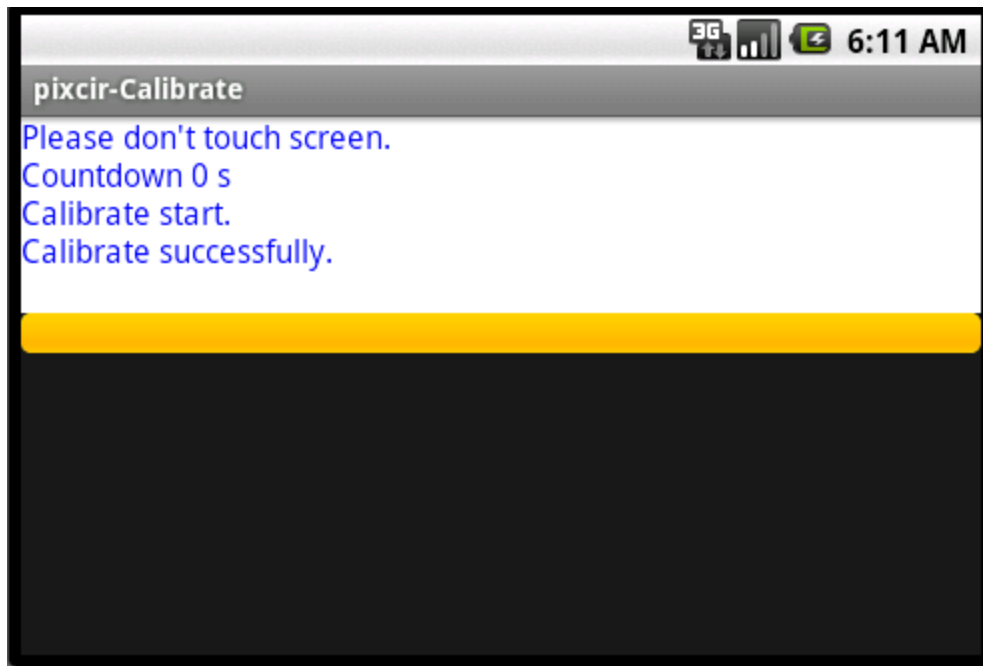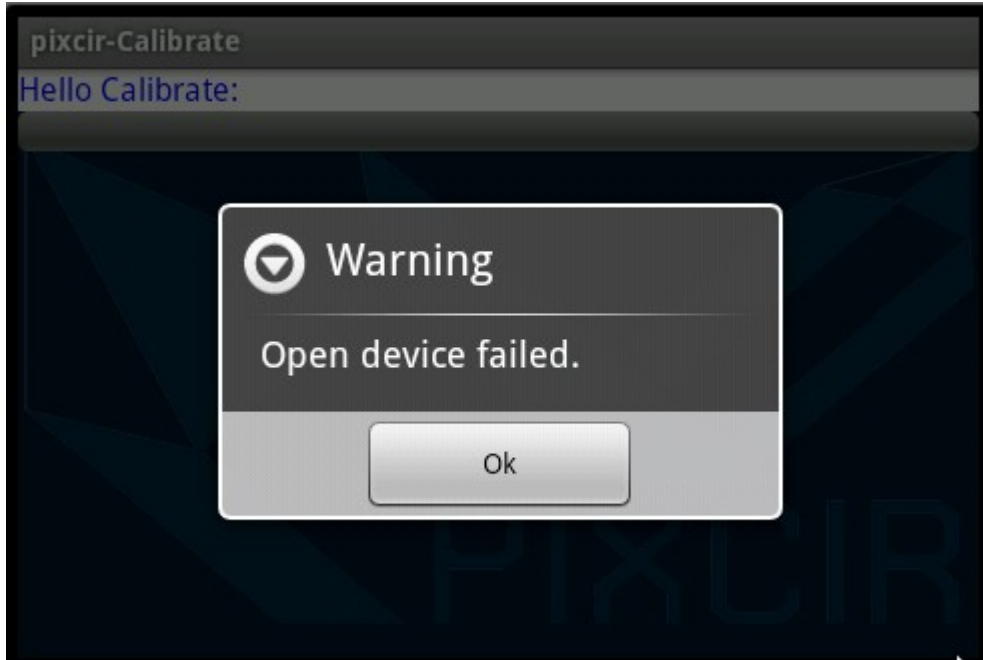

click "TangoC", shown below:

3.

3. Calibrate

click "Calibrate", shown below:

   If the following dialog box, please check whether the device or it can read and write.

      Re-run TangoC after modified, in order to function properly. other features also need to re-run TangoC.
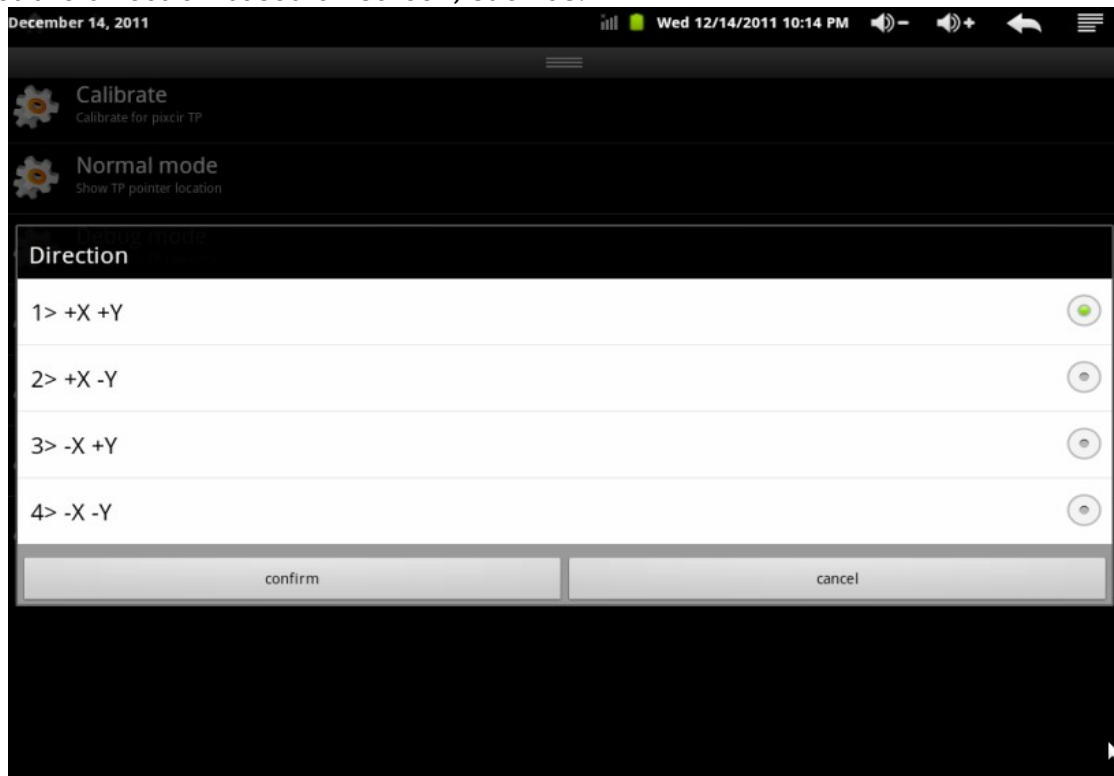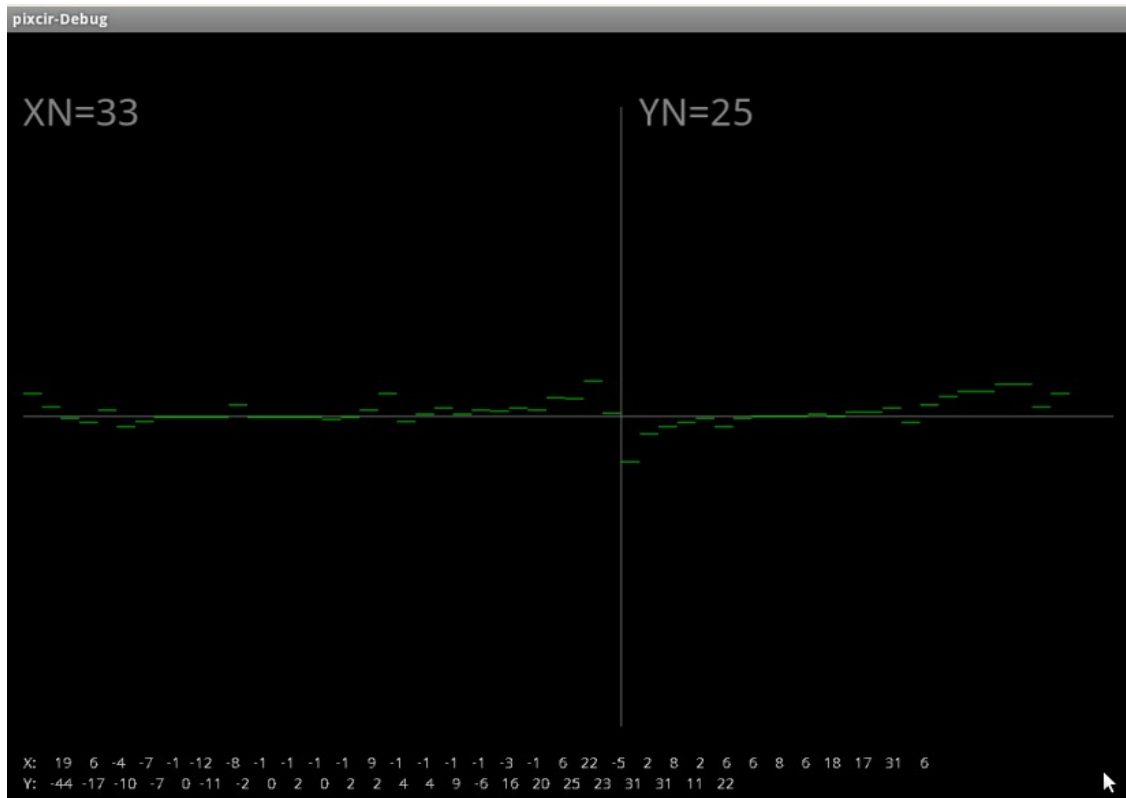
4. Normal mode
show below:

4.

5. Debug mode
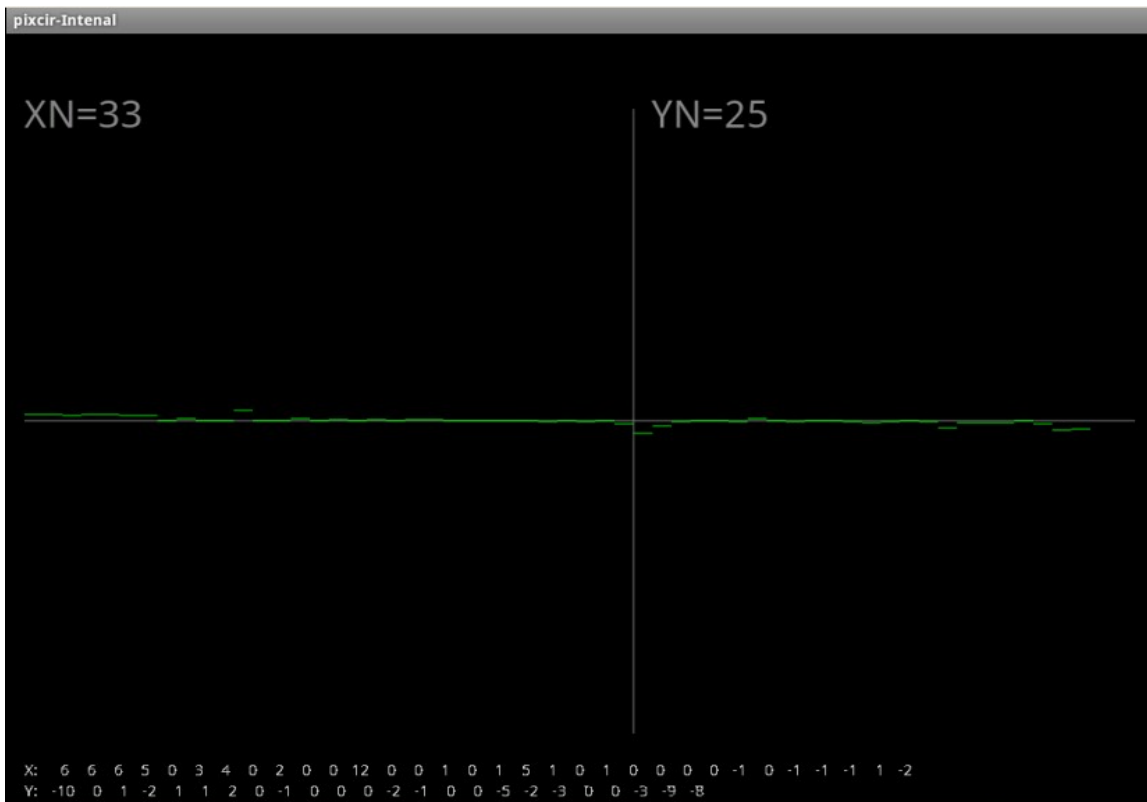Set the direction based on screen, such as:

click "confirm" button into debug mode, such as:

XN=33 YN=25

X: 19 6 -4 -7 -1 -12 -8 -1 -1 -1 -1 9 -1 -1 -1 -1 -3 -1 6 22 -5 2 8 2 6 6 8 6 18 17 31 6
Y: -44 -17 -10 -7 0 -11 -2 0 2 0 2 2 4 4 9 -6 16 20 25 23 31 31 11 22

Press the start and end on the diagonal points to end the program.

6. Internal mode

XN=33 YN=25

X: 6 6 6 5 0 3 4 0 2 0 0 12 0 0 1 0 1 5 1 0 1 0 0 0 0 -1 0 -1 -1 -1 1 -2
Y: -10 0 1 -2 1 1 2 0 -1 0 0 0 -2 -1 0 0 -5 -2 -3 0 0 -3 -9 -8
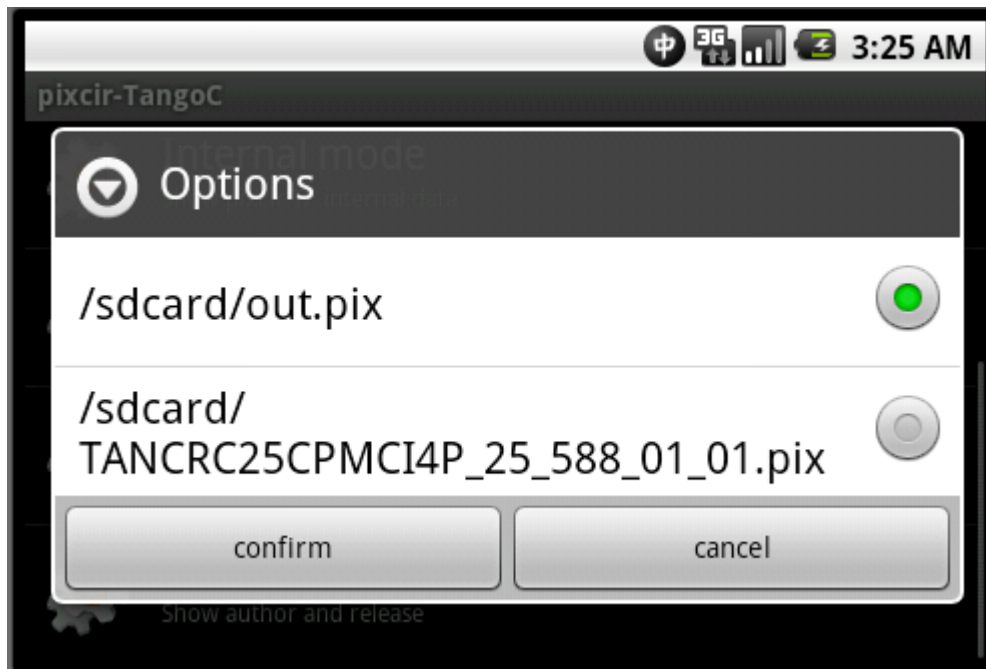
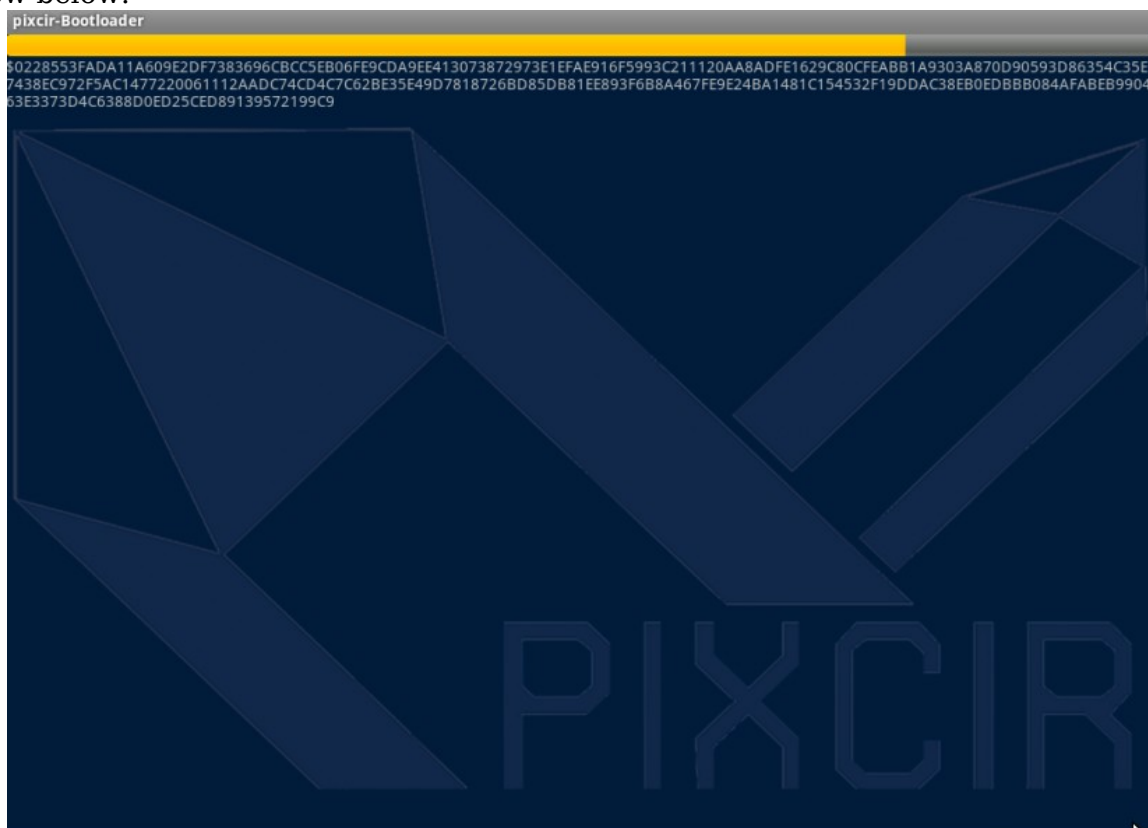Press the start and end on the diagonal points to end the program.
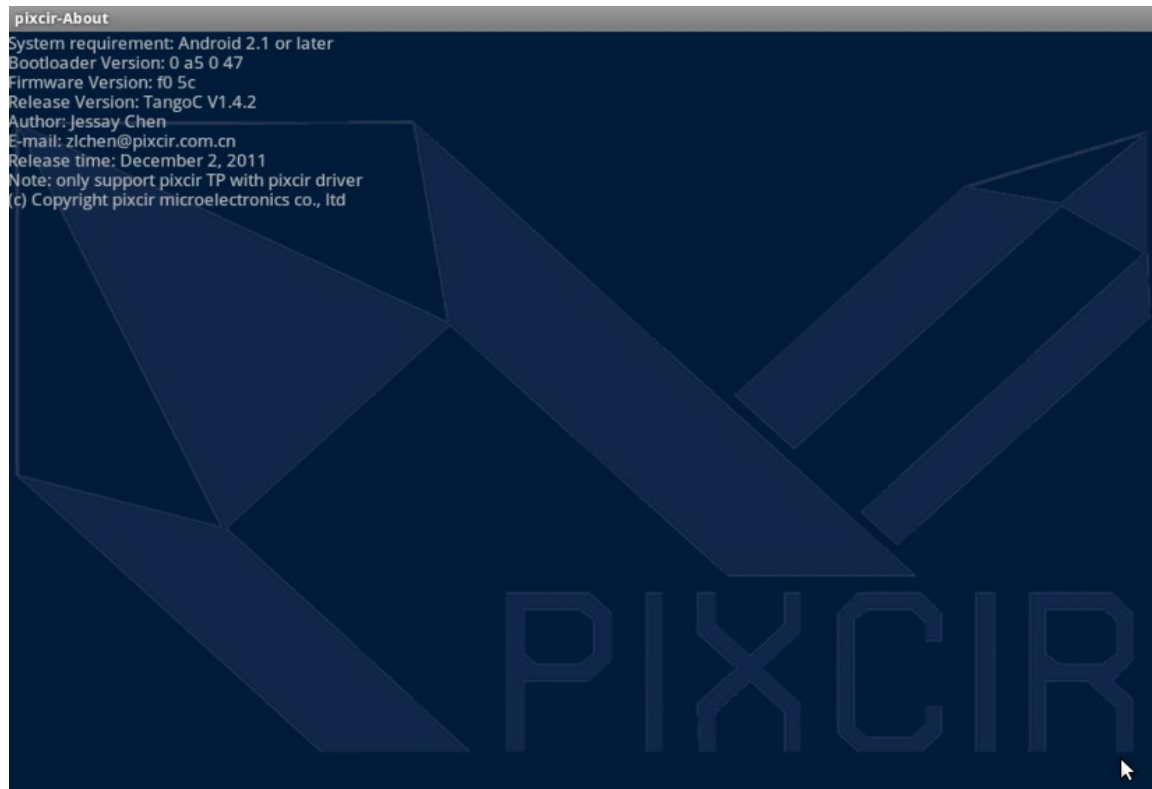
7. Bootloader mode

show below:

pix files must be placed in "/sdcard" directory.

Automatically search all pix files, select the file pix from the list, then click "confirm" to enter the bootloader, or cancel. bootloader successful show "Download successfully", otherwise, show"Download failed",

show below:

8. About

Display version number information.such as:

pixcir-About
System requirement: Android 2.1 or later
Bootloader Version: 0 a5 0 47
Firmware Version: f0 5c
Release Version: TangoC V1.4.2
Author: Jessay Chen
E-mail: zlchen@pixcir.com.cn
Release time: December 2, 2011
Note: only support pixcir TP with pixcir driver
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9. Command mode debugging

1> Calibrate command
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd c

2> Normal mode command
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd n

3> Debug mode command
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd d

4> Internal mode command
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd i

5> Raster mode command
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd r

6> Reset TP
 adb shell am start -n com.pixcir.tangoc/.Touch -e cmd t

7> Bootloader mode command
download "/sdcard/auto.pix", such as:
adb shell am start -n com.pixcir.tangoc/.Touch -e cmd b -e pix /sdcard/auto.pix

8> About command
adb shell am start -n com.pixcir.tangoc/.Touch -e cmd a

9> Kill process
adb shell ps com.pixcir.tangoc
adb shell kill -9 PID