

KoC-CHOICE Humanitarian Tablets

HP Touchpad Setup -

GPS Update

30 Aug 2013

11 Sep 2013

Objective

Update an HP Touchpad tablet previously installed with CyanogenMod9 (Android) for CHOICE Humanitarian in Nepal. This update will enable GPS (but disables camera and compass). GPS functionality is needed in the TaroWorks app to pinpoint data collection locations.

Background

Most HP Touchpads do not include a GPS device, and GPS functionality was left out of CM9 software builds for the HP Touchpad (tenderloin) device. However, the HP Touchpad "4G" model does include a GPS radio. These models were manufactured for sale through AT&T's distribution channels and expected to be used with AT&T's mobile data network in the U.S. Few, if any, of these models were ever sold. However, the "HP Touchpad 4G" model is the version of tablet that was donated to Kids on Computers and is being used in Nepal. A customized build of CyanogenMod is available that enables GPS in this device.

Files referenced in this guide are available on USB drive, or can be downloaded at the following URL. This guide is also available here:

<http://www.kidsoncomputers.org/data/KoC-CHOICE-Tablets/>

Updated 9/11/2013 - Found a new build that enables GPS without breaking the camera and compass!

Update Steps

- Using a computer or laptop, download the following file (approx 129MB):
 - http://www.kidsoncomputers.org/data/KoC-CHOICE-Tablets/CyanogenMod9/cm-9-SNAPSHOT-4g_alpha2-tenderloin.zip (Camera and Compass not working!)
 - http://www.kidsoncomputers.org/data/KoC-CHOICE-Tablets/CyanogenMod9/cm-9-MBM_L-20130902-4g_beta2-tenderloin.zip
- Start Touchpad in CyanogenMod
- Connect Touchpad to laptop using USB cable
 - You should see a pop-up on the computer allowing you to transfer files to the Touchpad's sdcard. If you do not see the Touchpad drive from your computer, you can boot the Touchpad to WebOS and attempt to transfer the file below while running WebOS
- Transfer **cm-9-SNAPSHOT-4g_alpha2-tenderloin.zip** and **cm-9-MBM_L-20130902-4g_beta2-tenderloin.zip** to the cminstall/ folder on Touchpad
- After transfer completes, eject Touchpad from your computer (leave USB cable connected)
- Power off the Touchpad
- Re-check that the USB cable is connected from laptop to Touchpad

- While holding the Volume Up button, press and hold the Power button for a few seconds. This should start the tablet with an “HP” logo briefly, then show a large white USB image
- On the laptop, change to the directory where you have ACMEInstaller3, then run the following command:
 - `novacom boot mem:// < ACMEInstaller3`
 - If you don’t have novacom installed, or don’t have ACMEInstaller3, please review steps here:
 - http://wiki.kidsoncomputers.org/index.php?title=HPTouchPad:Linux_Setup
- Touchpad will briefly show the “HP” logo, then two penguins with a lot of scrolling text below
 - The scrolling text will last about 1-2 minutes, then the Touchpad will reboot
 - After reboot, the Touchpad will update applications, then reboot again
- GPS update is complete
- Modify installed applications as follows:
 - ☞ ~~Remove camera icon from desktop (since it no longer works)~~
 - ~~Long-press icon, drag to “Remove” at top of screen~~
 - ☞ ~~Uninstall Google Sky Map (non-functional without compass)~~
 - ~~Open Settings, then Apps~~
 - ~~Click “Google Sky Map”, then uninstall~~
 - ~~If an error about “superuser” appears, dismiss it.~~
 - Install GPS Status & Toolbox app
 - Open Google Play
 - Search “GPS Status”
 - Install
 - If you get an error “Error retrieving information from server. [RPC : S-5 : AEC-0]”, follow these steps to resolve
 - Open Settings, then Accounts & Sync
 - Select the koc.hhttp.choiceXX@gmail.com account
 - (Remember the account number; it will be 01-25)
 - Use the menu, then “Remove Account”
 - Add account, Google, existing
 - Use same account name: koc.hhttp.choiceXX@gmail.com, where XX is the number of your account (see label on back of tablet). Password is “kockoc12”
 - Skip credit card and other optional settings
 - Once account is added, return to Play Store, accept agreement, and add “GPS Status & Toolbox app”
 - Return to Home screen, then long-press and drag the **GPS Status** icon to the screen to the left, and place between **Maps** and **GPS Essentials**
 - Launch app to test GPS functionality.
 - If GPS coordinates are not shown within about 60 seconds, and no satellites are reported, the tablet may need to be rebooted
 - If GPS coordinates are still not shown, try disabling wifi, then opening Google Maps. Google Maps should attempt to activate the GPS.