Installing TiLP2 on Mac OS X 10.4.8 (tested on 10.4.9, may work on other versions)
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Required programs:

– GCC and GNU binutils: Available in the XCode packages on the last OS X installation disc, or for download at http://developer.apple.com/tools/download/ (free Apple Developer account required). Notice! This over 900 MB. You do not need to install all of the options, but you do need at least gcc 4.0 and the first three (Mac OS X SDK, BSD SDK, and X11 SDK) under Software Development Kits. I used XCode 2.4.1; this includes GCC 4.0.1. Your mileage may vary with different versions.
– An X server. I use Apple's X11.app, which should be on one of your installation discs.

Recommended programs:

– MacPorts (http://www.macports.org/): This vastly simplifies installing some of the libraries needed. It'll pull in dependencies for GTK+, and contains a fairly large library of open-source programs available for easy install.

Required libraries:

– These libraries may or may not be required, depending on how you configure gtk2, if you do it yourself:
    – expat
    – libiconv
    – gettext
    – pkgconfig
    – glib2
    – atk
    – zlib
    – libpng
    – freetype
    – fontconfig
    – render
    – xrender
    – Xft2
    – cairo
    – pango
    – jpeg
    – tiff
– gtk2
– libxml2
– libglade2
– libti*

Procedure:

1. Install GCC and binutils from the XCode package. If you install the bare minimum as listed above, it shouldn't take more than a few minutes. If you choose to install most everything, it may take almost an hour, even on a recent Mac.

2. If you are going to use MacPorts (highly recommended), install it now.
    1. Download and install the main package.
    2. Open Terminal and ensure MacPorts is up to date:

        elric:~ ajanata$ sudo port sync
        Password:
        elric:~ ajanata$ sudo port selfupdate
        DarwinPorts base version 1.400 installed
        Downloaded MacPorts base version 1.442
        Configuring, Building and Installing new MacPorts base
        selfupdate done!
        elric:~ ajanata$

3. Install libusb (http://libusb.sourceforge.net/). MacPorts has 0.1.12 with no special patches required. `sudo port install libusb` if you are using MacPorts, otherwise follow the normal installation procedure.
4. Install gtk2's (long) list of dependencies, then gtk2. MacPorts makes this very easy: `sudo port install gtk2` will install the dependencies (for me, this was expat-2.0.0_1, libiconv-1.11_4+darwin8, gettext-0.16.1_0, pkgconfig-0.21_0, glib2-2.12.12_0, atk-1.18.0_0, zlib-1.2.3_1, libpng-1.2.18_0+darwin_8, freetype-2.3.4_0, fontconfig-2.4.2_0+macosx, render-0.9_0, xrender-0.9.0_0+darwin_8, Xft2-2.1.7_0, cairo-1.4.6_0, pango-1.16.4_0, jpeg-6b_1, and tiff-3.8.2_0+darwin_8. You may not strictly need all of these if you are rolling it manually, see what you can get by with from configure in gtk2.), then gtk2, all in one step. MacPorts installed gtk2-2.10.11_0.
5. Install libglade2's dependency (libxml2-2.6.28_0), then install libglade2-2.6.0_1.
6. Download and extract the libti* bundle (http://www.ticalc.org/archives/files/fileinfo/374/37479.html).
7. Configure, make, and sudo make install libticonv.
8. The rest of the libti* libraries won't find information they need about the previous libraries. You're going to have to build up an environment variable before each ./configure. They also tend to have issues with Native Language Support, so that needs turned off too. In other words:

    elric:~/Desktop/tilp/libtifiles2-3-1.0.5 ajanata$ PKG_CONFIG_PATH="../libticonv2-1.0.2" ./configure --disable-nls

    Then, make and sudo make install.
9. Next is libticables. Configure as below, then make and make install.

    elric:~/Desktop/tilp/libticables2-1-1.0.5 ajanata$ PKG_CONFIG_PATH="../libticonv2-1.0.2:../libtifiles2-3-1.0.5" ./configure --disable-nls

10. Now libticalcs.

    elric:~/Desktop/tilp/libticalcs2-2-1.0.6 ajanata$ PKG_CONFIG_PATH="../libticonv2-1.0.2:../libtifiles2-3-1.0.5:../libticables2-1-1.0.5" ./configure --disable-nls

11. Now that all of the libti* are installed, it's time to move onto TiLP itself (http://www.ticalc.org/archives/files/fileinfo/374/37480.html). Also, unless you intend to install KDE on your Mac for some reason, disable TiLP's support for it.

    elric:~/Desktop/tilp/tilp2-1.04 ajanata$ PKG_CONFIG_PATH="../libticonv2-1.0.2:../libtifiles2-

3-1.0.5:../libticables2-1-1.0.5:../libticalcs2-2-1.0.6" ./configure --disable-nls --without-kde

12. If everything went well, TiLP2 should be ready to be used! Plug in your link cable of choice, fire up X11.app, and give it a try.

> elric:~/Desktop/tilp/tilp2-1.04 ajanata$ DISPLAY=":0.0" /usr/local/bin/tilp
> TiLP2 - Version 1.04, (C) 1999-2006 Romain Lievin
> THIS PROGRAM COMES WITH ABSOLUTELY NO WARRANTY
> PLEASE READ THE DOCUMENTATION FOR DETAILS
> built on May 20 2007 13:55:11
> ticables-INFO: ticables library version 1.0.5
> tifiles-INFO: tifiles library version 1.0.5
> ticalcs-INFO: ticalcs library version 1.0.6

13. You may want to add tilp to X11's Applications menu. Applications -> Customize Menu..., then add a new item and point it to /usr/local/bin/tilp.