

# Introduction

This document describes how to create and use a bootable USB stick to make it easier to install some hacks on your S3 AU/NZ TiVo. You will need a PROM mod for your TiVo in order to use these hacks.

The script has been tested with two Tivo software versions (11.3b8 and 11.3b10) it should work with both, but it is recommended to use 11.3b10 if possible.

The script will:

- Modify the kernel (kill initrd). This is required for all other changes to work
- Install some useful utilities on the hard disk
- Install ssh and telnet
- Enable the serial port console
- Add 30 second skip and backdoor menus
- Change the configuration so that guide data is picked up from the oztivo guide

This is the second step (after PROM mod) to keep your TiVo working after October 2017.

## Step 1 - gather the required files

Download unetbootin.

Latest (as at Sept 2017) is available here

<https://github.com/unetbootin/unetbootin/releases/download/655/unetbootin-windows-655.exe>

Download the puppy linux ISO tahr-6.0-CE\_PAE.iso from

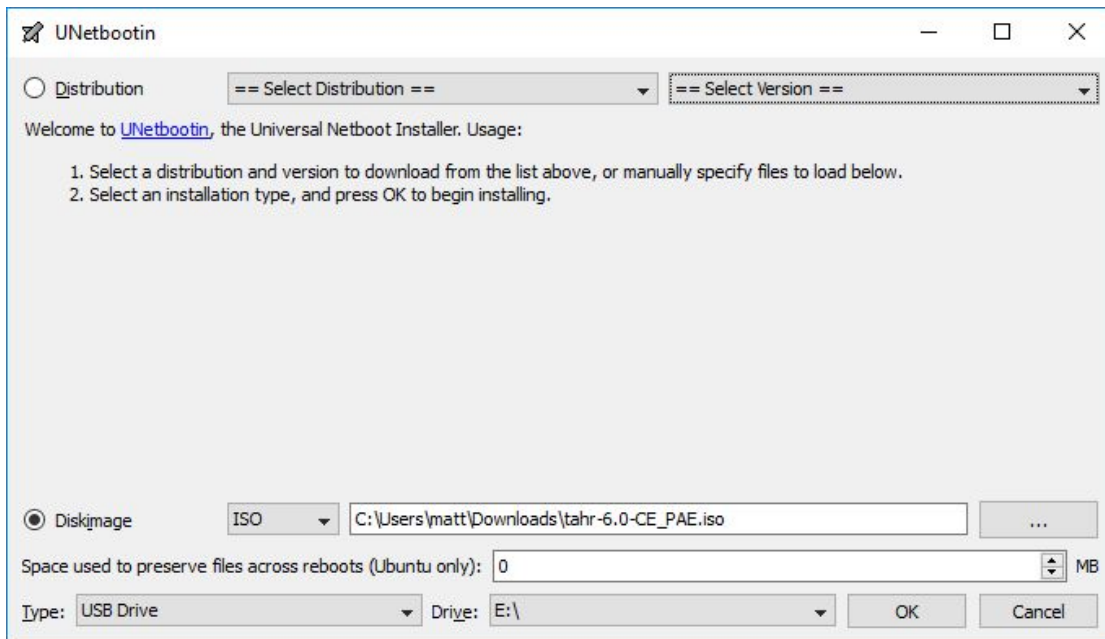
[http://distro.ibiblio.org/puppylinux/puppy-tahr/iso/tahrpup%20-6.0-CE/tahr-6.0-CE\\_PAE.iso](http://distro.ibiblio.org/puppylinux/puppy-tahr/iso/tahrpup%20-6.0-CE/tahr-6.0-CE_PAE.iso)

Download the tivo installer from [hd.oztivo.net](http://hd.oztivo.net) (current version is 0.6)

## Step 2 - Create the USB Boot disk

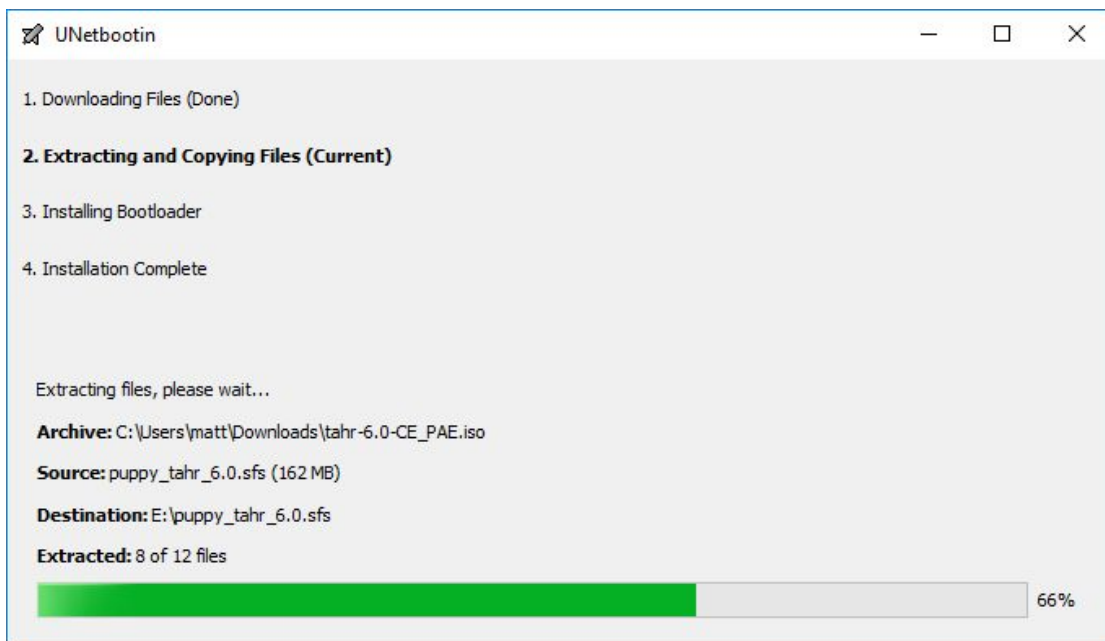
You will need a USB disk formatted on windows (FAT32) to build your boot disk. You don't need lots of capacity. 4GB is more than enough.

Run Unetbootin, select ISO file and browse to the location of the tahr-6.0-CE\_PAE.iso that you downloaded in step 1

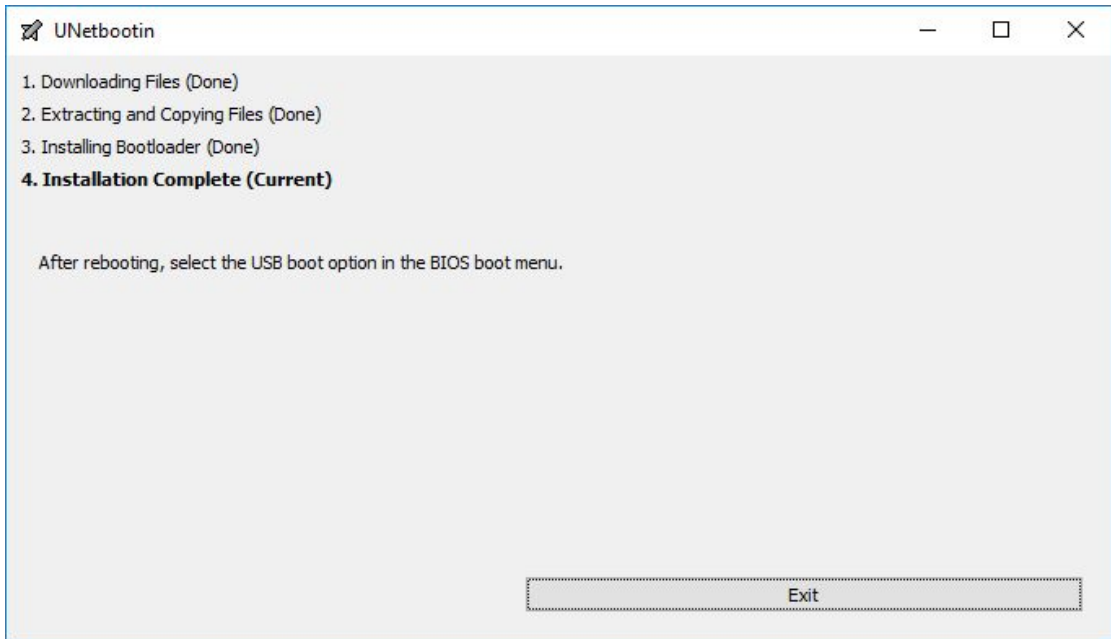


Make sure that you have selected the correct USB drive and click 'OK'

Unetbootin will copy the relevant files from the ISO image to the USB, and make it bootable



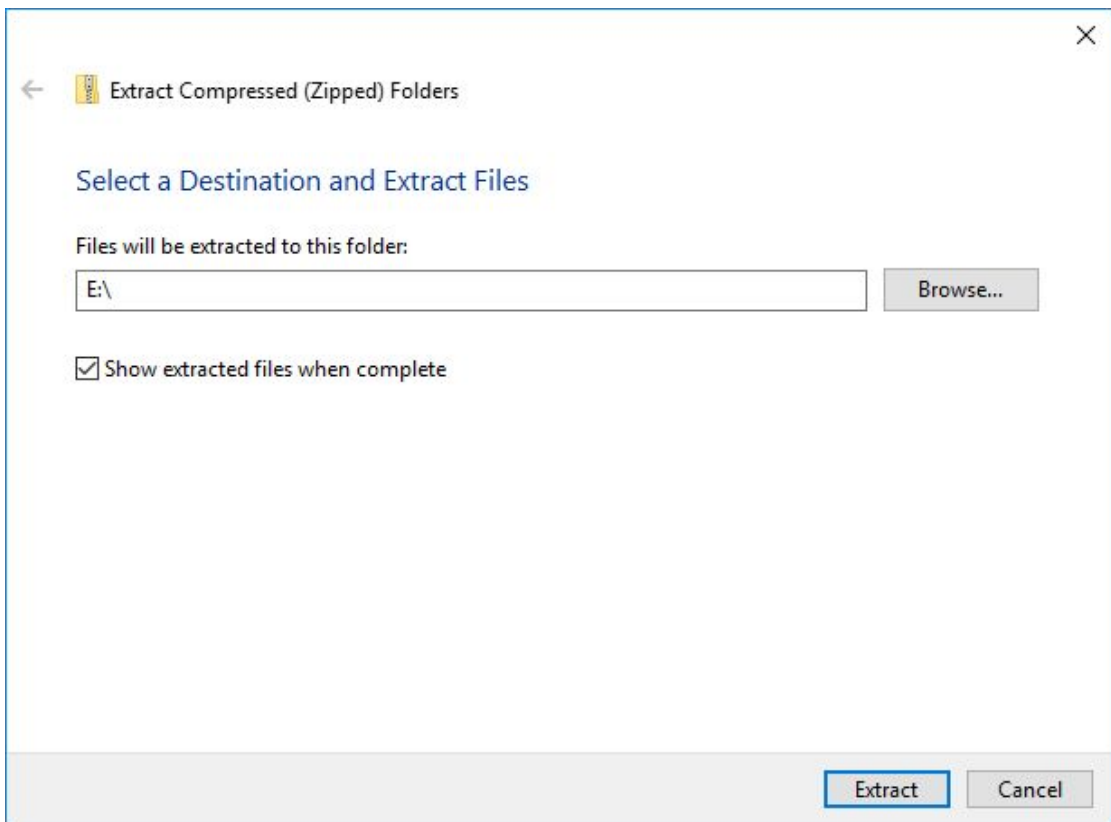
Once the installation is complete, you can exit unetbootin



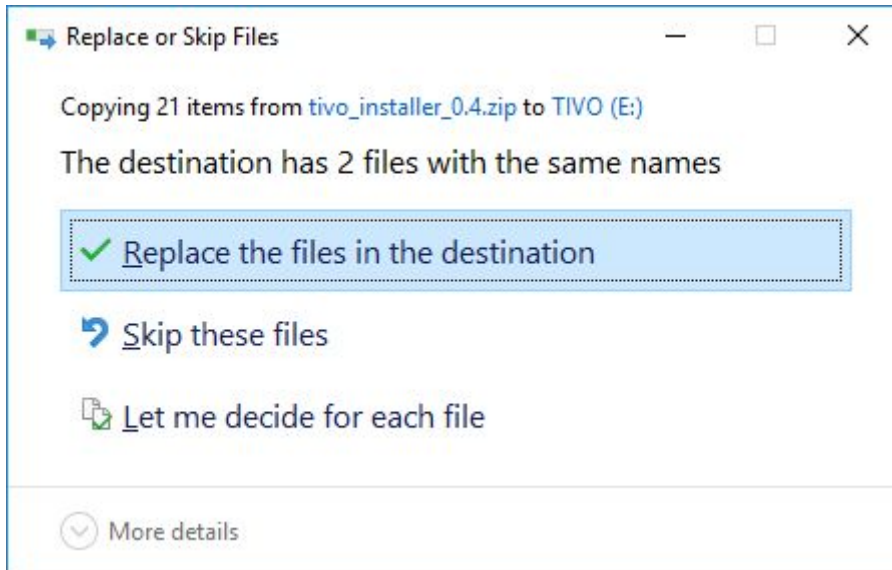
Now to add the TiVo installer files. Open the installer zip file (tivo\_installer\_x.y.zip) where x.y is the version number.

Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
tivo_installer	File folder					28/10/2017 11:11 AM
boot.msg	Outlook Item	1 KB	No	1 KB	2%	10/10/2017 11:04 AM
isolinux.cfg	CFG File	1 KB	No	1 KB	26%	21/09/2017 10:00 PM
oztivo.16	16 File	2 KB	No	10 KB	89%	10/10/2017 11:15 AM
syslinux.cfg	CFG File	1 KB	No	1 KB	27%	21/09/2017 10:00 PM
tahrsave-tivo.2fs	2FS File	1,732 KB	No	32,768 KB	95%	29/10/2017 8:29 PM

Extract all the files to the USB drive (in this instance E:)

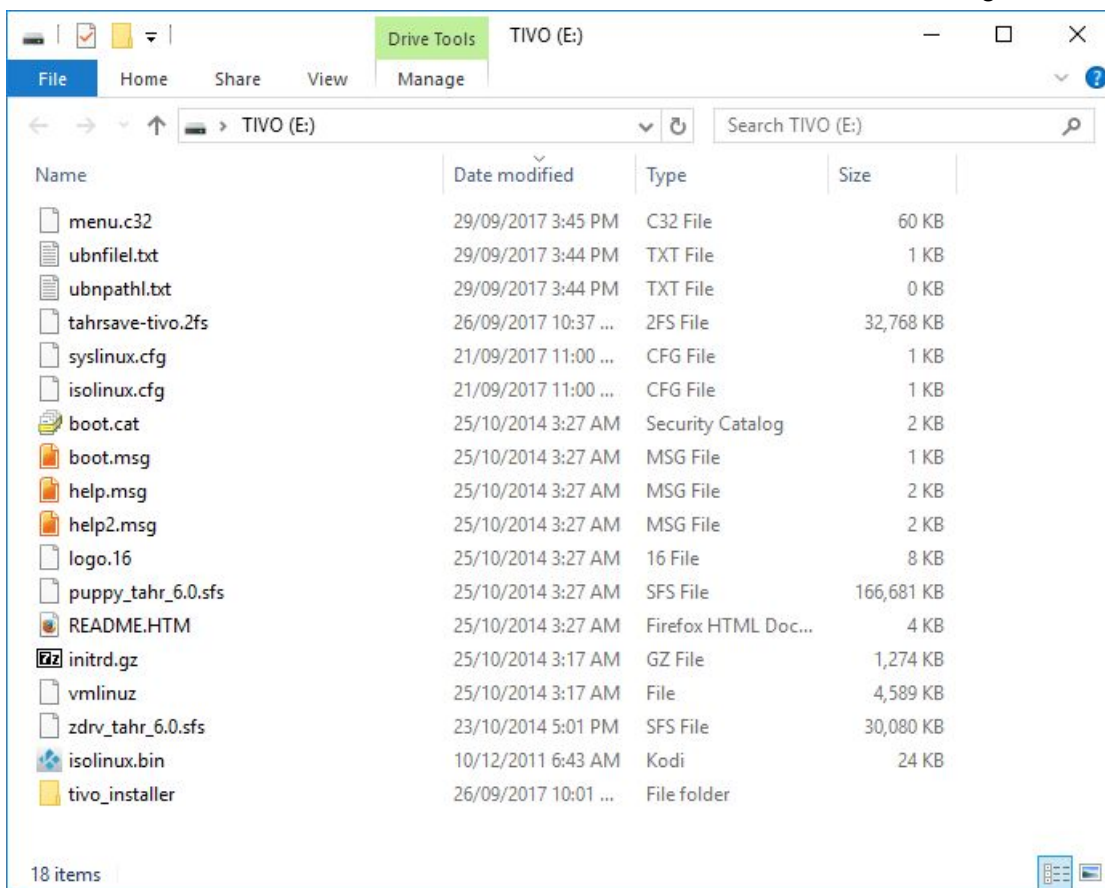


You are overwriting some files on the USB, so if you get asked something like this:



Select the first option (replace files in the destination)

When it's finished, check the files on the USB drive. It should look something like this:

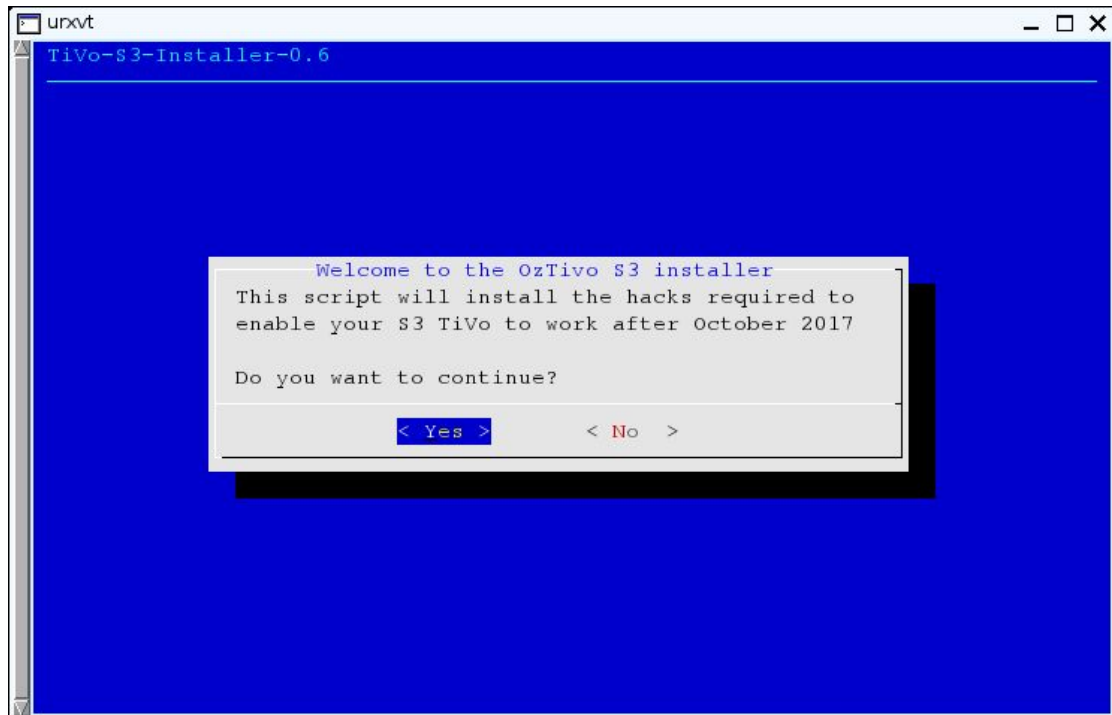


Notice, the tahrsave-tivo.2fs file and the tivo\_installer directory.  
Now Eject the drive and you are ready for step 3.

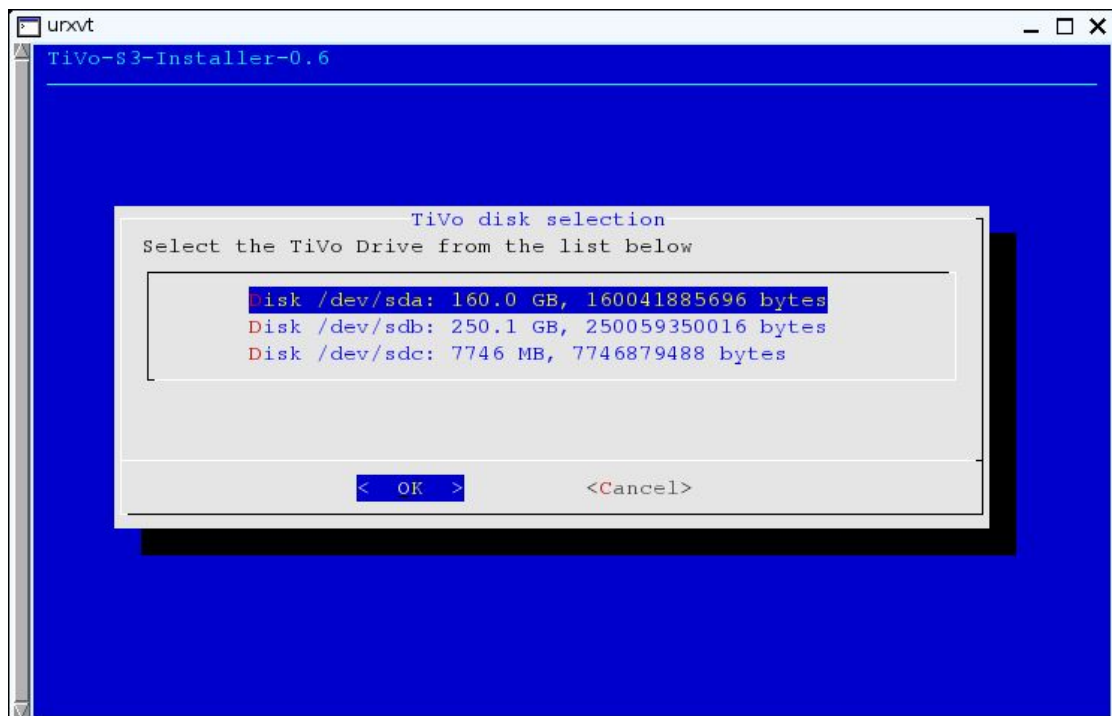
## Step 3 - Run the installer

To run the installer you will need a PC that can boot from USB and has a spare SATA connector. It is recommended (though not essential) to unplug all other hard drives from your PC. You can use desktop/tower PC with SATA ports on the

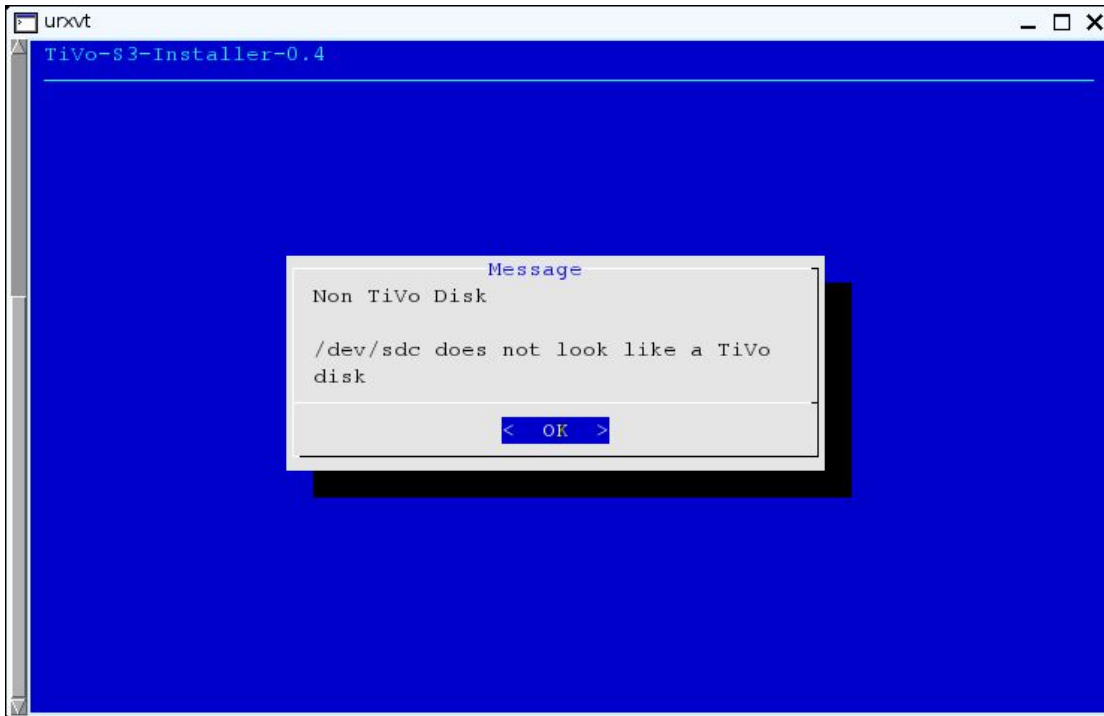
motherboard. You should also be able to use a USB to SATA converter on a laptop or desktop PC, although some issues have been reported (drive not found). YMMV. Plug in your TiVo disk and the USB stick and reboot the PC, doing whatever is required to boot from the USB. The PC should boot into puppy linux and you will get this screen:



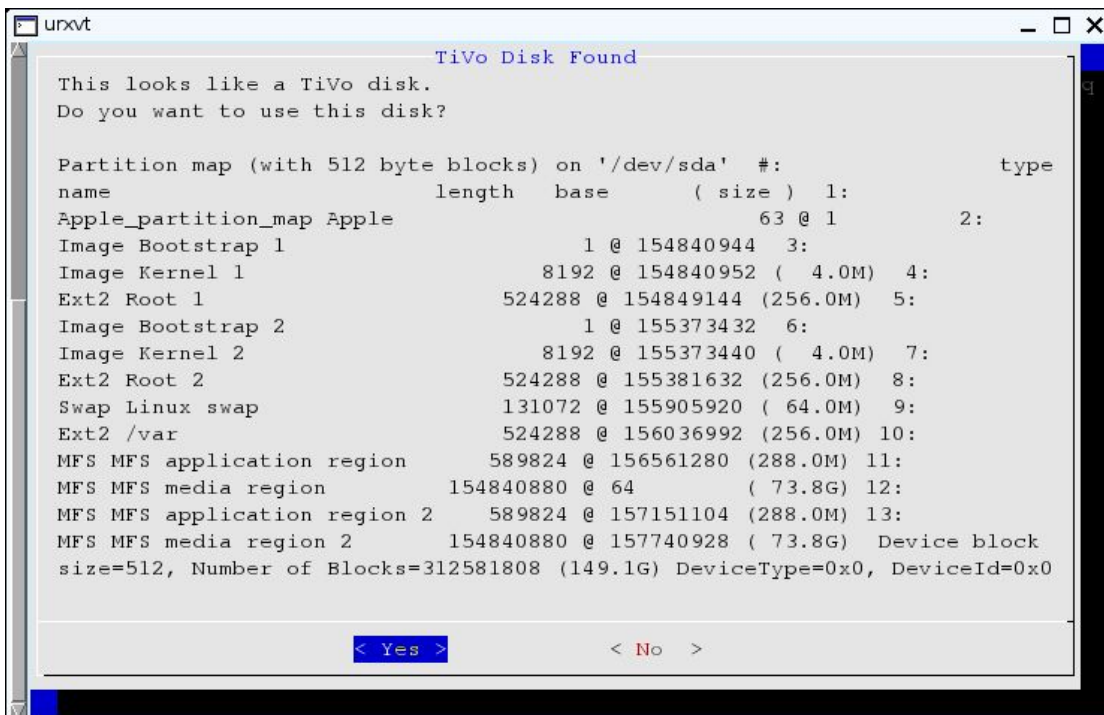
If you select 'Yes' then you will be prompted to select which drive to modify.



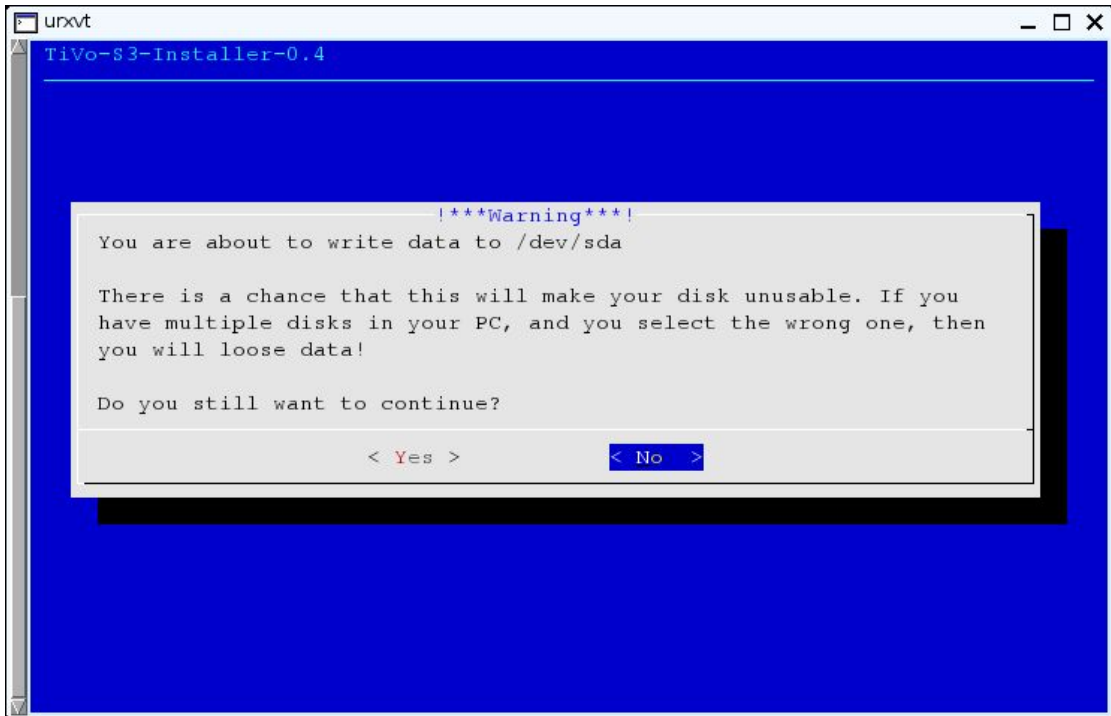
The installer will do some checks to make sure it's a valid TiVo drive. If not, you will get this message



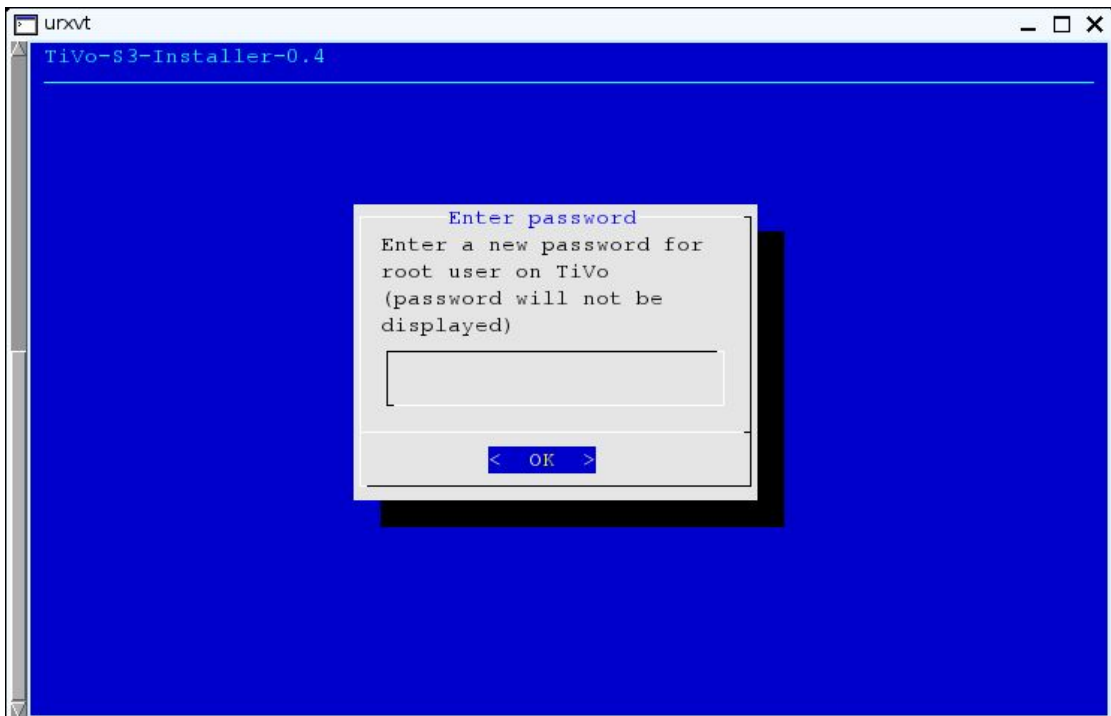
Once you have selected a TiVo disk you should see something like this:



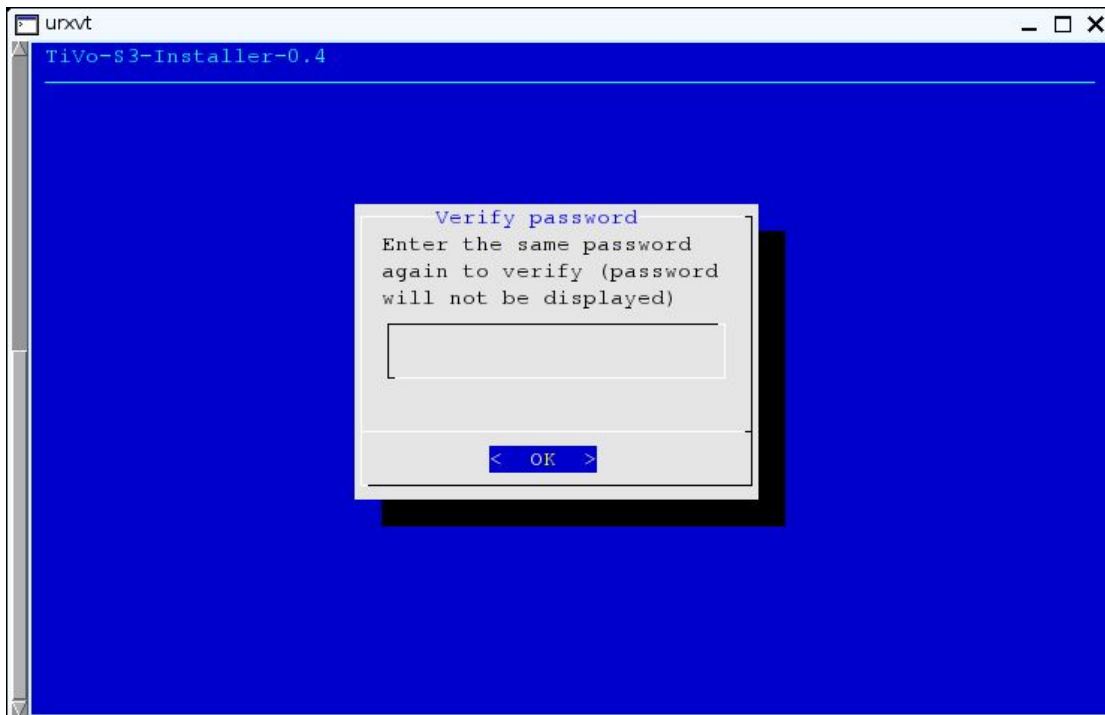
Selecting 'Yes' will give you one last chance to quit:



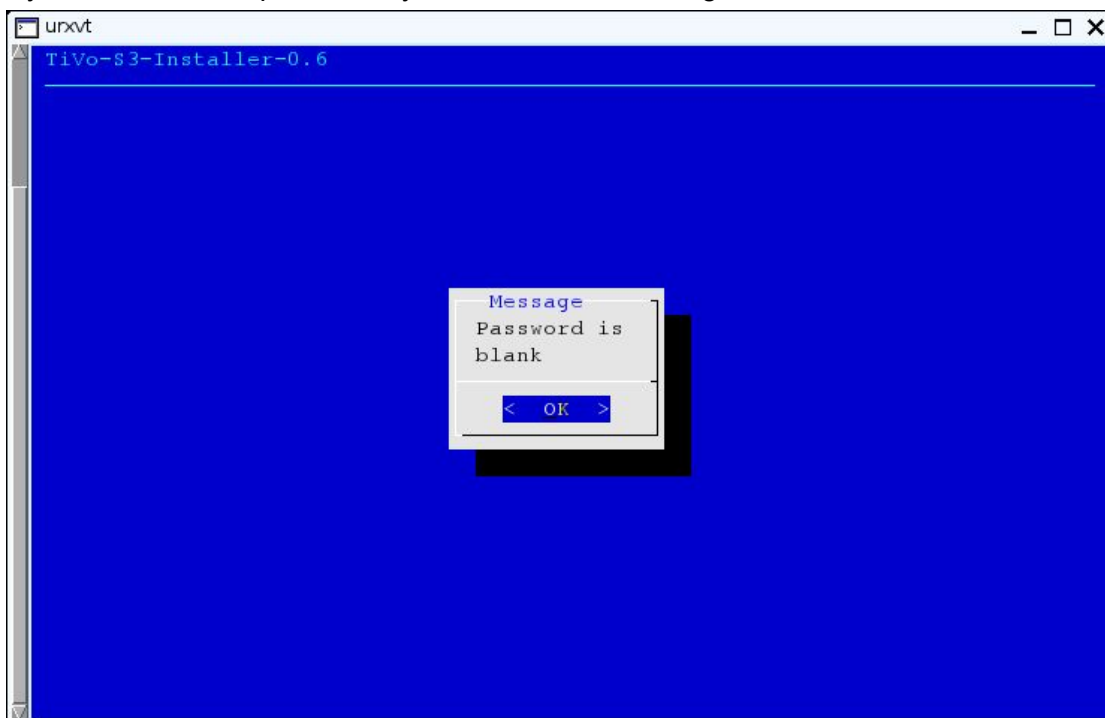
If you select 'Yes' now, the installer will prompt you for a new root password for your TiVo. The root password is required to enable ssh access to your TiVo. This will allow you to login to the TiVo once it has started.



And then confirmation



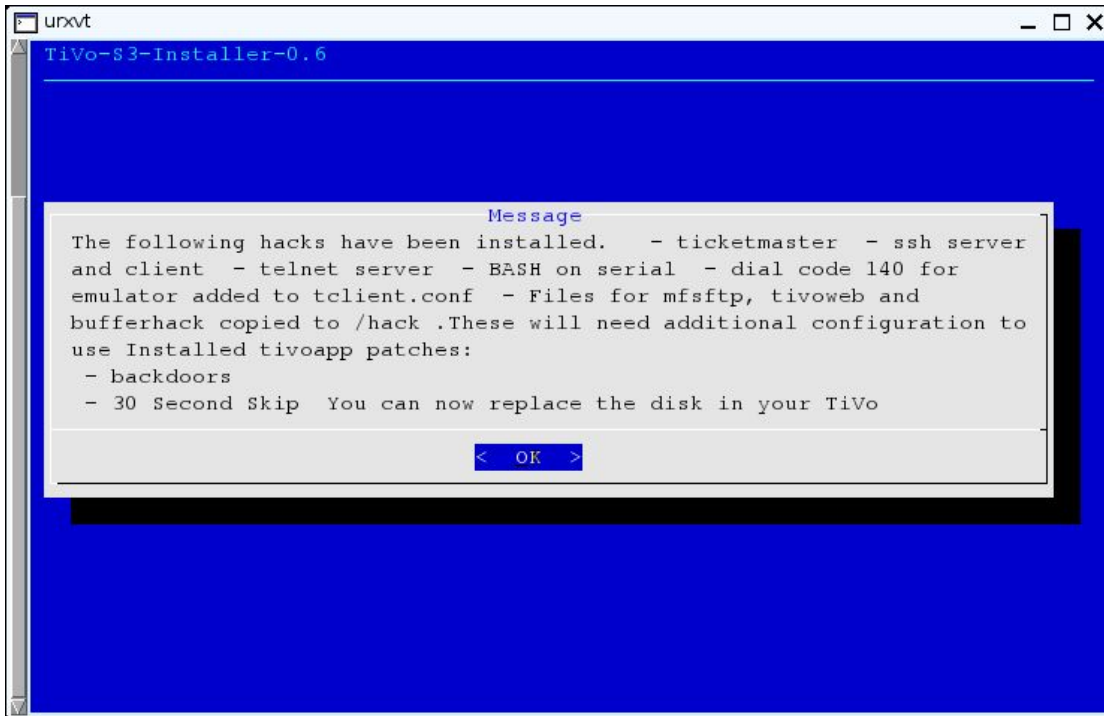
If the passwords don't match, you will be asked for them again.  
If you enter a blank password, you will see this message:



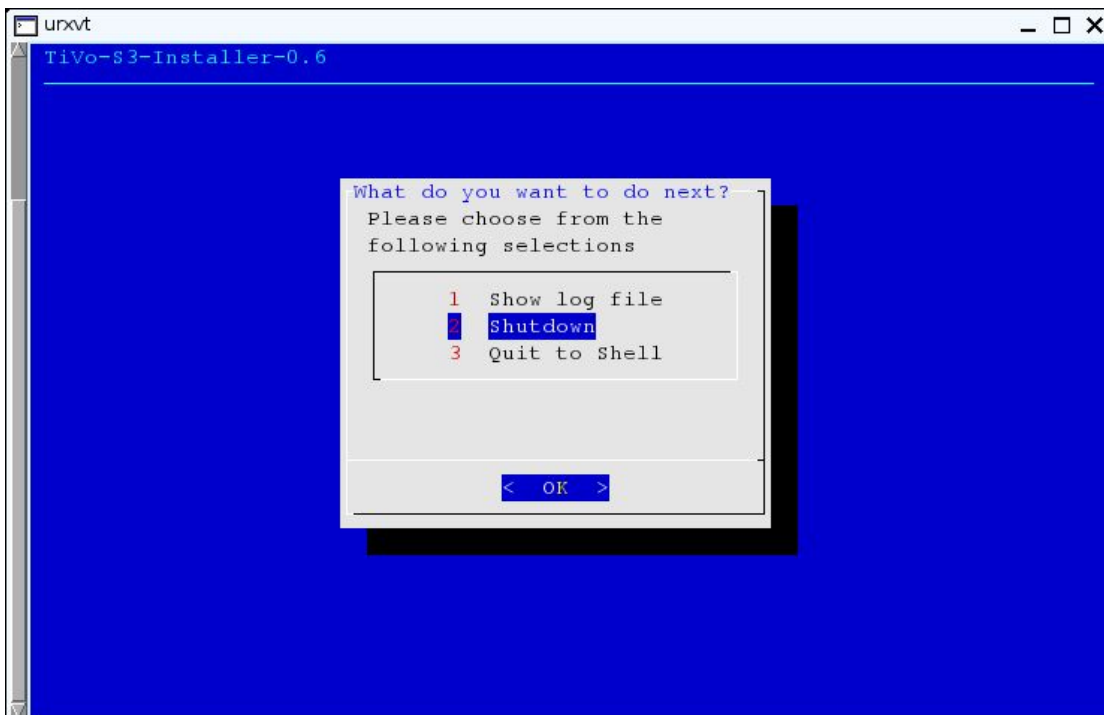
The installation will then continue.

A number of info messages will flash on the screen. Eventually, if all goes well, you should see this:



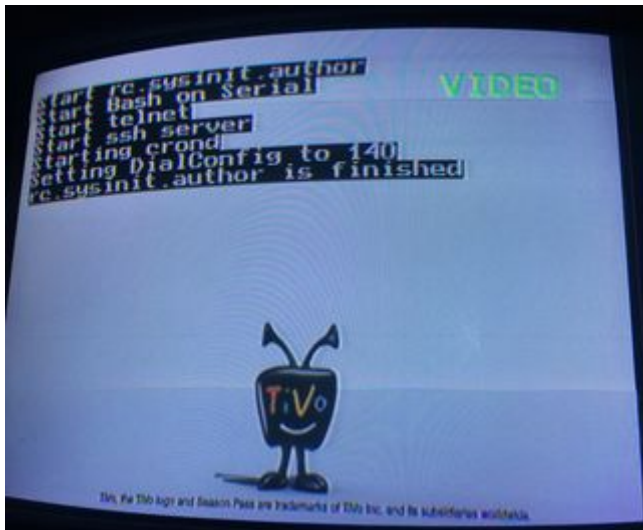


Select 'OK' and you will see this screen:



Now select 'Shutdown' and you are done!

You can now power off your PC, put the disk back into the TiVo (which must have the PROM mod) and then start your TiVo which should boot with the hacks installed. If it all worked, the TiVo will go through it's normal (slow) boot process. Near the end of this, you will see a bunch of messages on the TV showing the hacks that have been installed.



(note, this picture is from an earlier version. Yours should look similar, but may not be exactly the same)

-- End --