

A guide to the July 2006 "Bastille Day" firmware update

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Introduction

This guide explains how to upgrade your TF5800 to the new (July 2006) firmware, and how to start using the new features that firmware contains. It also contains a partial list of the changes in the new firmware, known as the Bastille Day update, which is version 5.12.88, dated 5th July 2006.

Do I need to upgrade?

Yes, we think so. Although the Toppy works very well with the December 2005 firmware, there are still some niggles and bugs, which are addressed in this update. It also includes

enhanced support for OTA (over-the-air) updates, which will make future updates easier.

You can check the firmware version of your TF5800 by pressing the Menu button on the remote, moving to Information with the up and down keys, then pressing OK. On the next screen, select IRD Status, and press OK again. You should see a screen like the one on the right, with various software versions shown. The important information is the Application Version. The December 2005 firmware is version 5.12.25, and is considered very stable and reliable. If you have any earlier firmware, an upgrade should be considered mandatory.



If you have Application version 5.11.52, your Toppy has the original UK firmware, and we strongly recommend that you upgrade to a newer version, which will increase compatibility with TAPs.

Versions of firmware starting with 5.11 do not have the ability to update over the air. This feature was introduced in version 5.12.00.

What do I need to do the upgrade?

There are a number of ways that the firmware on your TF5800 can be upgraded:

- 1. Using a USB cable to connect to a PC running Windows
- 2. Using a serial cable to connect to a PC running Windows
- 3. Using a serial cable to connect to another TF5800 that's already been upgraded.
- 4. Using the ToFi application on a Macintosh with OS X and USB 2.0 ports
- 5. Using ftp to a Toppy that's networked with a recent version of ftpd-topfield
- 6. Via an OTA (over the air) update, broadcast on the Freeview system.

In this guide, we shall cover only options 1 and 4, since most people will also want to use USB to transfer recordings and/or TAPs. Option five is suitable for advanced users, and those who have set up a network connection to their Toppy are unlikely to need this guide.

Option 6 allows you to upgrade your Toppy without disconnecting it, but can only be done when a broadcast of the firmware has been scheduled. When broadcasts are scheduled, they will be announced on the Topfield UK web site, and on Toppy.org.uk. A separate document explains how to perform an update via this method, and will be linked to the announcements on Toppy.org.uk.

Before you begin

If your Toppy has a firmware older than 5.12.09, you should perform a factory reset of your Toppy after a firmware upgrade. That means that you will need to store channels, recreate your favourite lists and add your timers again. So, before you start the update, turn your Toppy on while it's still connected to the TV, and make a note of your favourites. Then press Menu, select Recording, then OK, select Timer Recording and OK again to see your list of timers. Note these down on a piece of paper so you can re-create them later.

You can download the firmware update file - and all other firmwares that are available for download - from the firmwares page at <u>www.toppy.org.uk/downloads/firmware.php</u>.

If you have installed the UK Timers TAP, you can use that to save all your timers to a file on the hard drive via the Export option, which will allow you to re-import them later. Instructions for using this TAP appear on page 4.

Later firmwares, including 5.12.25, have been designed to try and avoid the need for a reset. However, it doesn't hurt to do one, and it may be a good opportunity to re-scan for any changes to the channel line-up if you haven't done so recently.

Updating the firmware from Windows

You will need the <u>Topfield PC utilities</u> installed, which you can access via their site or from the Toppy.org.uk software library. Install the utilities, including the TFDN USB application, which is the tool used to transfer the firmware. You'll also need to download the update from Topfield's web site. It is supplied as a Zip file, and should contain a text file with notes, and a file with the extension *.tfd*, which is the update itself.

If you have not installed the Topfield utilities yet, you may find it helpful to read the brief notes contained in our <u>Beginners' Guide to installing TAPs</u>, which you'll find at <u>www.toppy.org.uk/documents/</u>. Remember that you must install the software *before* first connecting your PVR to the PC.

Step 1: Preparing to install the update

Install the Topfield PC utilities if you haven't done so already. Download and unzip the update file, and make sure you know where you stored it on your disk. You can connect your TF5800 to the PC now; turn it on and start the Altair file transfer program, to verify that the connection is working. If you can't make Altair work, you won't be able to do the firmware update either.

When you are satisfied that you can connect to the Toppy, quit Altair, and then switch off your Toppy by pressing the Standby button on the front panel. *You must not turn it on again until you have the firmware prepared for download. You will not be able to transfer the new firmware to the Toppy if any other program, such as Altair, is trying to communicate with it.*

Step 2: Start the download application

Click the Start button, choose All Programs and find the Topfield Windows Applications group. Select the icon



TFDN USB within that folder, and you'll see a screen like the one shown here. Click the Find button at the top right and the normal Windows file open dialogue box will appear, looking for .tfd files.

Browse to the folder on your hard drive where you extracted the files that you downloaded from the Topfield web site, and highlight the firmware file, and then click on the Open button.

Step 3: Prepare the download

When you've located the update file on your hard drive, you'll be returned to the screen shown above, with the name of the update file visible in the FileName box at the top.

Click the Download button. It will grey out, as shown in the screen to the right, and the message Wait Download will appear in the bottom part of the window.

Step 4: Turn on the TF5800

Turn on your TF5800. Instead of the usual C456 message that appears during startup, the firmware will be loaded from the PC via the USB port. With a USB 2.0 connection, the actual transfer time is around ten seconds.

After the file has been transferred, you will see the letters Ap on the front panel display, counting down. At the end of the countdown, the display will flash the word End, indicating that the update is complete,



and you can now turn your Toppy off. On our test system, the whole process took about thirty seconds from turning on the TF5800 to completion of the update. If you have slower USB ports, it may take much longer.

Do not turn your TF5800 off until the word End appears on the front panel display, or you risk damaging it!

When you press the Standby button on the front panel, you may see a series of dots flash across the display, before it returns to the clock display. Your TF5800 is now updated with new firmware. You can check the version using the procedure outlined on the first page of this document.

Updating the firmware from a Macintosh

The Macintosh firmware update tool, ToFi, is a third party application, and though extensively tested, it is not the responsibility of Topfield, and is used entirely at your own risk. Note that it will not work on older Macs that have only USB 1.1 ports; you must have USB 2 on your Mac to use this application.

Step 1: Getting ready

ToFi can be downloaded via the links at <u>www.toppy.org.uk/downloads/mac.php</u>. Click the download link, and the application will be saved to your desktop. It can be run from there, or installed by dragging it to your

Applications folder. Unlike a PC, you do not need to install any additional drivers. Download the firmware update file, which will be supplied either as a zip file, which you will need to expand, or as a file ending in .tfd

Step2: Prepare the download

Launch ToFi by clicking on the icon. You will see a window like the one shown here; click the Upload firmware button, and locate the .tfd file for the firmware update, and then click Open. You'll be returned to the main ToFi window, and the button should be glowing blue.

Step 3: Perform the update

Ensure the TF5800 is turned off, and connect it to your Mac using a USB cable. Press the power button on the front, and the firmware update will start automatically.

🌔 ToFi	• A firmware updater for Topfield STBs
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 The STB should be off to start. Click the upload firmware button and select the firmware. Turn the STB on. You should see numbers counting down on the STB. 	This is an unofficial program and I take no warranty or blame for anything that goes wrong with the use of this program. Use at your own risk
 The STB should be off to start. Click the upload firmware button and select the firmware. Turn the STB on. You should see numbers counting down on the STB. Once the upload is finished, the STB counts down a further 20 seconds. 	This is an unofficial program and I take no warranty or blame for anything that goes wrong with the use of this program. Use at your own risk

After the C456 message shows on the front panel of the PVR, you should see a series of numbers counting down, prefixed by the letters dn. After this, the letters Ap will appear, followed by another countdown, after which the word End will flash on the display. The whole process will usually take around two minutes.

Do not turn your TF5800 off until the word End appears on the front panel display, or you risk damaging it!

When you turn the PVR off after performing the update, you may see a few flashing dots on the display; this is normal. You can check that the firmware has been updated via the system menus, in the usual way.

Mac and Windows: Errors during the update

If there are problems during the update, the front panel of the TF5800 will display the letter E followed by a number.

You cannot damage the PVR by trying to update the firmware again; the old firmware will not be over written unless the new firmware is downloaded successfully.

If errors occur, try using a different USB port on your computer, or a different cable; you are more likely to have errors when using long cables, or USB extension cables.

Ensure you are transferring the correct file, which must end in .tfd. You cannot send the .zip file that you may have downloaded from the web to your PVR; you must unpack it first.

Performing a factory reset

This step is optional, but recommended if you started with a firmware older than 5.12.09.

Reconnect the TF5800 to your television, if you unplugged it to perform the upgrade, and when it starts up, press the Menu button, then choose Installation and Factory Setting.

This will reset your system - but will not affect the contents of the hard disk drive - so all your recorded programmes will be fine. You will, however, need to store channels again, and create your favourite lists.

To store channels, press Menu, then select Installation and Service Search. Select Auto mode from the top option, then select Start Search and press OK. When the channels have been stored, recreate your Favourites, and finally, re-enter the timers that you noted down in the previous step, or import them from the file saved by the UK Timers TAP, if you have that installed on your Toppy.

Backing up and restoring timers using the UK Timers TAP

If you plan to perform a factory reset, you will lose all your timers. You can back them up and then restore them using the UK Timers TAP. You can download the TAP from <u>http://www.toppy.org.uk/downloads/</u>.

Install it in the usual way, and then call the TAP up by pressing the white key on your remote control. Press the Menu key to reach the Options screen, then move to Export Timers and press Enter. Your timers will be saved in a file on the Topfield's hard disk.

To restore timers, follow the same procedure, but choose the Import option instead. Your timers will be restored from the backup file.

A note about TAPs and firmware updates

Normally, most TAPs will remain compatible following a firmware upgrade, so you will not have any problems with them. If, however, you were previously using the original UK firmware, version 5.11.52, you will need to update most TAPs to versions that are compatible with newer firmware.

If you experience problems with TAPs after a software update, remember that you can stop them from loading automatically by pressing the 0 key on the remote control while the Toppy is starting up. You may also want to consider moving TAPs out of the Auto Start folder before performing the upgrade, and moving them back when you are happy that they work with the new version.

For the July 2006 update, the testers found some specific issues relating to TAPs, detailed later in this document.

Issues addressed by the July 2006 firmware update

The July 2006 "Bastille Day" update addresses a number of issues including the following:

EPG population, display and channel changing

Following installation of this update, when browsing through the Electronic Programme Guide, the channel in the picture in picture display will not change; as a result, the timeshift buffer will not be lost.

To change channels in the EPG, select the current programme on a different channel, and press OK.

Additionally, the PVR will now collect programme information for all channels, regardless of which channel you are tuned to; this ensures that a full 7 day guide for all channels will be available within a couple of minutes of turning on. Note that some broadcasters are still not very reliable at broadcasting an EPG, and tuning to a BBC station will probably fill the guide up quicker.

The guide now also displays the genre of the programmes listed, though you should note that this information is not always entered accurately by the broadcasters.

Subtitle performance

Subtitle performance has been dramatically improved in this firmware, and now appears to work correctly, without subtitles becoming garbled, appearing prematurely, or persisting on screen for too long.

Playback interruptions

Although not yet entirely resolved, this firmware will interrupt playback and viewing less often than before. While watching a programme in chase-play mode, at the end of the recording there will be a momentary interruption, but playback should normally resume from the correct position. *Note that this functionality is not 100% complete*.

There should be fewer 'Check your reservation' messages, where the PVR asks your permission to change channel.

On screen keyboards

When using the on screen keyboards, for example to name favourites lists, or enter details of timers, the coloured keys can now be used for Delete, Save, Shift and Space, making it a little quicker to enter information, since you no longer need to use the arrow keys to select these functions.

Archive list

The Archive list view now indicates that you can use the Play button to resume a previously watched file; this function was added in firmware 5.12.25, but not mentioned on screen; pressing OK starts playing a file from the beginning, while Play will start from where you last stopped watching it.

Favourites

If you use both TV and Radio favourites, you'll find that both settings will be saved when the box is switched off.

OTA Update notification

An on screen message will be displayed when OTA updates are available in future.

Known issues with this firmware

The following issues have been identified with the Bastille Day firmware; this is not an exhaustive list:

- When starting Picture in Picture (PiP), a black square may flash briefly in the top left of the screen before the PiP window appears at the top right. (New)
- When switching to a channel protected by a PIN, the 'Loading' message for interactive services will appear on top of the PIN request box. (New)
- If the volume bar is on screen when the Recall button is used to switch to a channel protected by PIN, the bar will not be hidden after the channel change. (New)
- The PVR does not automatically enter Run mode after a power cut when in standby, and will consequently not set the time. (Existing issue; an unofficial firmware patch may resolve this)
- Attempting to access BBCi News Multiscreen, or other interactive services that require a channel change, while dual recording with two or more TAPs running may cause a crash. (Existing issue).

TAPs and the Bastille Day firmware

In beta testing this firmware has been found to be reliable, however there are some specific issues that users may need to be aware of regarding TAPs.

Memory

Since the PVR now holds in memory a full 7 day guide for all channels, there is less memory available for TAPs. For many users, this will not present too much of an issue, however, some EPG-related software creates a copy of the programme guide in memory, for reasons of speed, or as a way around the previous shortcomings of the EPG. Since the EPG itself is now larger, these extra copies of the data will themselves be larger too; as a result, if you run several TAPs that each have a copy of the EPG, you may find that you experience memory issues, which can result in slow performance of TAP and even crashes.

TAPs known to fall into this category include MyStuff, Jag's EPG, EPG Navigator, MEI Search and some others. Running one or two of these TAPs is likely to cause few problems, but running a large number of them together may do so, and users may need to experiment to find the combination that works best for them, or reduce the number of other TAPs that they load simultaneously.

During testing, some issues were experienced with two TAPs that load external information into the PVR's EPG memory - mei2eit and EPG Uploader. Specifically, the Topfield info box may not update correctly to show the details of the current programme, and information may not be saved correctly with recordings.

The TAPs mentioned below have versions designed for better compatibility with this firmware and you should update as soon as possible; older versions may crash, or not run correctly.

Description Extender

A new version of Description Extender will be required to work with this firmware; you should ensure that you have at least version 1.4.

eit2mei

The eit2mei EPG gathering TAP for MyStuff needs to be updated to at least version beta 7.1.

EPG Uploader

You should update to at least version 3.10 of EPG Uploader. Note the comments above.

mei2eit

A new version of this TAP is required; you should be running at least version beta 2.4. Note the comments above.

MyStuff

MyStuff users are recommended to upgrade to version 4.51 as soon as possible; version 4.5 works with this firmware, but you may experience memory issues if running with many other TAPs.

Remote Extender

You must update to at least version 1.1

Updates to the Toppy.org.uk bug list

This update is regarded as a significant firmware release, and recommended for all users. To enable us to track feature requests, bugs and updates in future, the bugs database on Toppy.org.uk will be substantially updated following this release. All existing ratings and comments will be removed, and it will no longer be possible to rate or respond to issues that don't affect this firmware. Essentially, the Bastille Day update will be used as the basis for reporting bugs and requesting feature enhancements in future, so we can gain a better view of which issues are still viewed as important by users.

Document revisions

- 1.0 First public version
- 0.3 Third draft
- 0.2 Second draft
- 0.1 First draft

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