



# TF5800 PVR testing scheme

## ***Introduction***

The purpose of this document is to assist in testing firmware for the TF5800PVR, to check core functions work and identify issues that may need changing. You should work through as many of the tests in this document as possible, and mark whether the box passes or fails. In conjunction with this test scheme, you need the Channel Map document, which will help you to select channels for test recordings.

## ***Before you start***

Fill in the system information box below. You should also remove any TAPs from your Auto Start folder, and conduct tests without any TAPs running. You may, if you wish, perform a second series of test with TAPs installed, in which case you should note in the boxes provided which TAPs and which versions you used.

If you are running tests that involve setting timers for recordings, and have TAPs running, you should note for each test which TAP, if any, you used to set or amend the timers, if you did not create them using the standard Topfield interface.

Please power off your TF5800 at the mains for a minute or so before starting the tests; if you have just installed new firmware, please also perform a full factory reset.

## ***Your results***

When you have finished testing, report the results in the appropriate section of the Tuppy.org.uk web site. A web version of the test form will be available later.

For all the tests, unless the instructions specify otherwise, if the answer to the test question is Yes, the result is that the unit has passed that test. If the test is failed, please note separately how it failed. When noting channel numbers, put an R before the channel from which a recording was created, eg 2, R7, R5 to indicate that your box was set to view BBC2 and to record from BBC3 and five for a test involving dual recording.

### **System information**

Name:

Email:

Firmware version tested:

Loader version:

TV connection type (SCART, CVBS):

TV screen type (4:3, 16:9):

TV model:

Transmitter:

If running tests with TAPs, which versions are installed:

## Section 1 - Basic operation

### 1.1 TV reception

Are you able to receive TV stations on each of the multiplexes?

1.1		Pass / Fail:
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### 1.2 Instant record

Start a recording of the programme you are currently watching, and let it run for a few minutes. Does it record and play back without any problems?

1.2	Channel number:	Pass / Fail:
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### 1.3 Programme playback

Play an existing recording from your archive. Use the number keys to jump around several times. Does the file play back correctly, even after jumping around a lot?

1.3	Channel number:	Pass / Fail:
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### 1.4 Channel changing

Move rapidly many times between BBC1 and BBC2. Does the box remain stable?

1.4	Channel number:	Pass / Fail:
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### 1.5 Picture in Picture

Start Picture in Picture, and swap between the two channels. Does the box remain stable?

1.5	Channel number:	Pass / Fail:
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### 1.6 Radio stations

Switch to a radio station. Does the channel play correctly?

1.6	Channel number:	Pass / Fail:
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### 1.7 Chase play

Start a recording, then switch to another channel. After a few minutes, go to the archive, and select the current recording. Does playback start from the beginning of the recording?

1.7	Channel number:	Pass / Fail:
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## Section 2 - Recording

### 2.1 Timer recording while the PVR is running

Set a timer to start recording in a few minutes, while you are watching TV. Choose a channel that is on a different multiplex to the one that you are viewing. Does the recording complete ok, and leave a watchable file?

2.1	Channel number:	Pass / Fail:
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### 2.2 Timer recording while the PVR is in standby

Set a timer for any channel, and then leave the PVR in standby. Do not touch any buttons on the remote when it starts up for the recording. Does it shut down correctly after the recording, leaving a watchable recording?

2.2	Channel number:	Pass / Fail:
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Now repeat the test, but this time use the remote, for example to change channel or volume, while the recording is in progress. Does the recording successfully complete, leaving the PVR turned on?

2.3	Channel number:	Pass / Fail:
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### 2.4 Radio recording from Multiplex A

Set a timer to record from one of the following radio stations: Smash Hits, MOJO. Does the recording complete and play back correctly?

2.4	Channel number:	Pass / Fail:
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### 2.5 Radio recording from Multiplex B

Set a timer to record from any BBC radio station except the World Service. Does the recording complete and play back correctly?

2.5	Channel number:	Pass / Fail:
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### 2.6 Dual recording

Schedule two recordings, of core channels, from different multiplexes. Do both recordings complete and play back correctly?

2.6	Channel numbers:	Pass / Fail:
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### 2.7 Channel selection while dual recording, test 1

Schedule or start overlapping recordings from two channels, both of which are on the same Mux. While the recordings are running, press the OK or List button on the remote. Are you able to select from the full range of channels, and do both recordings complete correctly?

2.7	Channel numbers:	Pass / Fail:
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## 2.8 Channel selection while dual recording, test 2

Now, schedule or start two overlapping recordings, using two channels from different Muxes. While the recordings are in progress, press the OK or List button on the remote. Are the channels on Muxes other than those from which you are recording greyed out, so that you cannot select them, and do both recordings complete correctly?

2.8	Channel numbers:	Pass / Fail:
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## 2.9 Playback while dual recording

*This test identifies bug 62*

Schedule two recordings to start shortly, with each recording from a channel on a different Mux. Before either recording starts, switch to a channel on a third Mux, and then select an existing recording from the archive and start playing it. Continue watching until both recordings are in progress, and then stop the playback. If you are taken to the channel that you were watching before you started the playback, this test has failed. Do both recordings complete successfully? If playback is interrupted before the second recording starts, and the channel changed, and the recordings then take place ok, mark this test as a pass.

2.9	Channel numbers:	Pass / Fail:
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## 2.10 Recording from part time channels

Schedule a recording for the first programme of the day on a part-time channel, and adjust the start time so that it is a few minutes before the start of the channel. Does the file play back correctly from the beginning?

2.10	Channel number:	Pass / Fail:
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If the file does not play back correctly from the beginning, can you play it back if you call up the progress bar, then rewind to the beginning of the file, after the playback has been running for a short time?

2.11	Channel number:	Pass / Fail:
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## 2.12 Recording from part time pay channels

If you have a suitable CAM and subscription, repeat test 2.10, this time using a pay channel, eg Setanta Sports. Are you able to view the recording correctly from the archive?

2.12	Channel number:	Pass / Fail:
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Use the workaround described in 2.10. Can you view the recording now?

2.13	Channel number:	Pass / Fail:
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### **2.14 Watching while recording**

Start watching a recording while it is in progress, but some minutes behind real time. When the recording finishes, if you are dropped back to live TV, mark this test as failed. If you can continue to watch the recording until you reach the end, mark this test as passed.

*This test, and tests 2.15, 2.16, 2.17 and 2.18 are designed to identify the behaviour in bug number 12.*

2.14	Channel number:	Pass / Fail:
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### **2.15 Timer starts while timeshifting**

Set a timer for the next programme on the channel that you are currently watching. Now press pause, and wait a few minutes before resuming. You should now be watching time slipped television. When the recording starts on the current channel, are you able to carry on watching the time-slipped material?

2.15	Channel number:	Pass / Fail:
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### **2.16 Second recording starts while viewing live TV, test 1**

Start or schedule a recording. Now switch to another channel on the same Mux to view live TV. Schedule an additional recording for a channel on a different Mux, to start before the first recording completes. When the second recording starts, does your viewing continue uninterrupted?

2.16	Channel numbers:	Pass / Fail:
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### **2.17 Second recording starts while playing back a programme, test 1**

Start or schedule a recording. Now schedule a recording of a channel on a different Mux, and before that recording starts, begin playback of an existing recorded programme. When the second recording starts, are you able to continue viewing without interruption?

2.17	Channel numbers:	Pass / Fail:
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### **2.18 Second recording starts while playing back a programme, test 2**

Repeat test 2.17, but this time ensure that both recordings are from channels on the same Mux. Are you able to continue watching without interruption when the second recording starts?

2.18	Channel numbers:	Pass / Fail:
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### **2.19 Second recording starts while viewing live TV, test 2**

Start or schedule a recording. Now switch to a channel on a different Mux to view live TV. Schedule an additional recording for a channel on a third Mux, to start before the first recording completes. Your viewing of live TV should be interrupted so that the second recording can start. Do both recordings complete and play back correctly?

2.19	Channel numbers:	Pass / Fail:
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### 2.20 Back to back recordings, test 1

Schedule a recording for a programme and then for a second programme, starting exactly at the time the first recording ends. For example, a recording for 1900 to 2000 and from 2000 to 2030. Do both recordings complete correctly?

2.20	Channel numbers:	Pass / Fail:
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### 2.21 Back to back recordings, test 2

Repeat test 2.20, but this time with an additional recording set so that it overlaps both recordings, for example from 1930 to 2015. The first and second recording should be from channels on the same Mux. Do all recordings complete correctly?

2.21	Channel numbers:	Pass / Fail:
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### 2.22 Back to back recordings, test 3

Repeat test 2.20, but this time alter recording times so that there is one minute between the timers, eg recording one finishes at 1959 and recording two starts at 2000. Each recording can be from a different Mux. Do both recordings complete correctly?

2.22	Channel numbers:	Pass / Fail:
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### 2.23 Back to back recordings, test 4

Repeat test 2.22, but add an additional recording that overlaps both the other recordings. Do all recordings complete correctly?

2.23	Channel numbers:	Pass / Fail:
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### 2.24 Recording from pay TV, test 1

Schedule a recording from a pay TV channel, and before it starts, ensure that you are viewing a core channel live. Does the recording from the pay TV channel complete and play back correctly?

2.24	Channel number:	Pass / Fail:
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### 2.25 Recording from pay TV, test 2

Now, remove your subscription card and attempt to play back the recording that you made in test 2.24. Does the file play back correctly? Mark this test as failed if you are told the recording is scrambled.

2.25	Channel number:	Pass / Fail:
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### **2.26 Recording from pay TV, test 3**

Schedule a recording from a pay TV channel. Before the recording starts, tune to another pay channel and start watching. Does the recording complete and play back correctly, when your subscription card is installed?

2.26	Channel numbers:	Pass / Fail:
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### **2.27 Decrypting pay TV recordings**

Switch to a core channel, and then select for playback the programme that you recorded in test 2.26. When the playback has started, press the Record button on the remote control to start making a copy of the encrypted programme. When the copy has finished, remove your subscription card. Does the copy file play back correctly? If you are told that the copy of your encrypted recording is also encrypted, mark this test as failed.

2.27	Channel number:	Pass / Fail:
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### **2.28 Recordings set from main menu, test 1**

Create a timer entry via the system menus, rather than via the EPG. Set the timer for the scheduled time of a programme that's on later, but DO NOT enter a name for the recording. Leave it blank. Does the recording complete successfully, and it correctly named with the title, as broadcast via the EPG?

2.28	Channel number:	Pass / Fail:
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### **2.29 Recordings set from the main menu, test 2**

Perform test 2.28 a second time, but this time add padding of two minutes to the start of the recording, ie if the programme is scheduled to start at 1900, set the timer to start at 1858. As before, DO NOT enter a file name for the recording in the menu. Does the recording complete correctly, and is it named for the appropriate programme? To determine if this test passes or fails, you may need to view the Now and Next information; if the information is correctly updated at the start of the programme, but the file is named for the previous programme, mark this test as failed.

2.29	Channel number:	Pass / Fail:
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## Section 3 - Interactive functions

**3.1, 3.2, 3.3 Tests removed - no longer relevant**

### **3.4 BBC News multiscreen**

From a BBC channel, press Red to start BBC interactive, and select the News Multiscreen. Does this work correctly, allowing you to select any of the four small video streams, and hear the appropriate audio?

3.4		Pass / Fail:
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### **3.5 Exiting BBC News multiscreen**

After viewing BBC News multiscreen, can you exit to normal TV correctly?

3.5	Channel number:	Pass / Fail:
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### **3.6 BBC News multiscreen when recording**

Start a single recording of a non-BBC channel, from any mux except Mux 1 and Mux B, and then try to access BBC News multiscreen. Does this work correctly? Indicate which channel you were recording.

3.6	Channel number:	Pass / Fail:
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### **3.7 BBC News multiscreen when dual recording**

Start recording from two channels, including one from Mux 1 and one from any other Mux except Mux B. Now, from one of the BBC channels on Mux 1, attempt to access the BBC News multiscreens. If the box allows you to do this, or if it crashes, you should mark it as failed.

3.7	Channel numbers:	Pass / Fail:
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### **3.8 Teletext page selection**

From an ITV or Channel4, press Red to start Teletext, and select an option from the main page. Does this work?

3.8		Pass / Fail:
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### **3.9 Teletext news ticker**

From an ITV or Channel4 channel, press Red to start Teletext and select page 702. Does the news ticker scroll across the page without flashing on and off?

3.9		Pass / Fail:
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### **3.10 BBC radio MHEG menus**

On a BBC radio channel, does the interactive menu display correctly?

3.10		Pass / Fail:
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## Section 4 - Subtitling

### 4.1 Presence of subtitles

Do subtitles appear at all when enabled via the Opt menu?

4.1	Channel number:	Pass / Fail:
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### 4.2 Subtitle timing

Do subtitles appear at the correct time? If you feel that they are appearing too early, mark this test as failed.

4.2	Channel number:	Pass / Fail:
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### 4.3 Subtitle persistence

Do subtitles disappear from the screen after the appropriate time? If they persist until another subtitle appears, even after a long pause, mark this test as failed.

4.3	Channel number:	Pass / Fail:
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### 4.4 Subtitle colouring

Do subtitles appear in the correct colours?

4.4	Channel number:	Pass / Fail:
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### 4.5 Subtitles on recorded programmes

Create a recording of a programme that has subtitles. Are the subtitles still available when you play back the recording?

4.5	Channel number:	Pass / Fail:
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### 4.6 Subtitles on live TV when paused

Start watching live TV with subtitles turned on. After a few minutes, press the Pause button. Do the subtitles stop correctly, along with the image and sound?

4.6	Channel number:	Pass / Fail:
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## Section 5 - Widescreen support

This section of the test scheme is designed to verify that the PVR is correctly signalling the appropriate shape of image for your TV screen, according to the information sent via the broadcaster. To assist in performing these tests, you should turn off any auto-zoom options on your TV set, eg those which automatically fill the screen on a widescreen set, regardless of the type of material being broadcast. The TV should simply follow the signalling sent by the PVR. Ensure that the AV settings menu on your PVR is correctly set for the type of TV you are using.

Unless you have both a widescreen and a 4:3 television set, you will not be able to complete all tests in this section. Simply skip the tests that do not apply to your screen.

### 5.1 4:3 material displayed on widescreen television sets

Tune to UKTV History. This channel always broadcasts material in 4:3 aspect ratio. Does the picture display correctly, ie with black bars at the left and right sides?

5.1	Channel number:	Pass / Fail:
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### 5.2 Widescreen material displayed on widescreen television sets

Tune to BBC News 24. This channel always broadcasts in 16:9 aspect ratio. Does the picture display correctly, filling the whole screen, with no material missing at top and bottom?

5.2	Channel number:	Pass / Fail:
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### 5.3 Test removed - no longer possible to perform

### 5.4 4:3 material on 4:3 television sets

Tune to UKTV History. This channel broadcasts in 4:3 all the time. Press the 0 button on your remote control. A message in the top right of the screen should show, in turn, 16:9 full, 4:3 Center extract and 4:3 Letterbox. There should be no visible change in the picture displayed.

5.4	Channel number:	Pass / Fail:
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### 5.5 16:9 material on 4:3 television sets

Tune to BBC News 24. This channel normally broadcasts material in 16:9 widescreen. Press the 0 button to cycle through the widescreen options. In 4:3 letterbox mode, you should see small black bands at the top and bottom of the screen. In 16:9 Full mode, you should see the same picture, but slightly stretched vertically; there should be no black bands, and faces may appear slightly elongated; the News 24 logo box will be slightly taller too. In 4:3 Center extract mode, you should notice that faces are in more normal proportions, and the News 24 logo is slightly closer to the left hand edge of the screen, and will be more square than in 16:9 Full mode.

5.5	Channel number:	Pass / Fail:
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## Section 6 - Other tests

### 6.1 File selection in folders

*This test identifies bug 41*

Create a short recording of a current programme, using the instant record function. Stop the recording after a few minutes and move it to a folder. Do not change the name of the file. Now start another recording of the same programme.

Navigate to the folder where you moved the original recording, and select it for playback. Does the file play back correctly, or does the PVR instead start playing the newer recording? If the first recording is played correctly, mark this test as passed, otherwise mark it as failed.

6.1	Channel number:	Pass / Fail:
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### 6.2 Standby while recording, test 1

Start a recording, and before the recording is scheduled to finish, press the power button on the remote. When the confirmation dialogue appears on screen, select Yes, but do not press OK. Does the box complete the recording and then switch off, leaving a valid recording?

6.2	Channel number:	Pass / Fail:
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### 6.3 Standby while recording, test 2

Perform the same test as 6.2, but this time select No. Does the box complete the recording and then switch off, leaving a valid recording?

6.3	Channel number:	Pass / Fail:
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### 6.4 Sleep while recording

Start a recording, and more than ten minutes before the recording is scheduled to finish, press Opt and set the sleep timer to 10 minutes. Does the countdown pause at 1 minute, until the recording has finished, with the PVR switching off approximately one minute after the recording ends?

6.4	Channel number:	Pass / Fail:
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### 6.5 Picture break through in games

Start playing the Bomb Hexa game, and then leave the game paused for several minutes. If, after several minutes, a Picture in Picture display appears on top of the game, mark this test as failed.

6.5	Channel number:	Pass / Fail:
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### 6.6 Favourites selection

Select a group of favourites while watching TV. Now switch to radio mode, and then switch back to TV. Has your selection of favourites been correctly remembered?

6.6		Pass / Fail:
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### 6.7 Playback while in radio mode, test 1

Switch to radio mode and start to play back a previously recorded television programme. Does the file play back correctly?

6.7	Channel numbers:	Pass / Fail:
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### 6.8 Playback while in radio mode, test 2

Now, using the same file as in test 6.7, and with the PVR still in radio mode, use the progress bar or number keys to move around to different positions in the recorded television programme. Does playback resume correctly when you have moved within the file?

6.8	Channel numbers:	Pass / Fail:
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### 6.9 Verification of test file for 6.7,6.8

Now, to ensure that the file used in tests 6.7 and 6.8 is valid, stop playback, and switch the PVR back to television mode. Start playing back the same recorded programme and jump to the same locations as in test 6.8. Does the file now play back correctly?

6.9	Channel numbers:	Pass / Fail:
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### 6.10 Running status

Leave the PVR tuned to the same channel for a couple of hours, so that one or more programmes ends and new ones begin. Check the EPG. Is the correct programme marked as the current one (ie preceding ones are shown in grey)

6.10	Channel numbers:	Pass / Fail:
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### 6.11 EPG population

Switch the PVR off and then on again, to ensure EPG data is not stored in memory. Stay tuned to a single channel, and call up the EPG. If you navigate through channels in the EPG, is the data for channels on all muxes being fetched?

6.11	Channel numbers:	Pass / Fail:
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