

# Release notes for ZX Touch firmware v1.13

Welcome to Firmware Upgrade v1.13 for the ZX Touch gaming console.

This update introduces two major features that expand the capabilities of the system: WiFi connectivity and the new ZX Touch FX System.

As always, the firmware can be upgraded using the stand-alone FUT application built into the console. Detailed instructions are available in the user manual.

**NOTE:** After updating the firmware, it is recommended to reset the device to factory settings to ensure proper initialisation of the new parameters introduced in this update.

## Change log:

### 1. WiFi connection and services

ZX Touch now supports WiFi connectivity and introduces two built-in services for wireless file transfer:

- **Web File Manager (WFM)**
- **FTP Server**

Both services allow transferring files between the console and external devices (PC, tablet or smartphone), but they are intended for slightly different use cases.

#### 1.1. Web File Manager (WFM)

Web File Manager is the simplest way to access the console over WiFi.

It runs directly in a web browser, so no additional software is required. This makes it especially convenient for quick tasks such as:

- copying a few game files to the SD card
- downloading files from the console
- organising folders or adjusting the SD card structure

Because it works on any device with a browser, it is equally usable on PCs, tablets and mobile phones.

#### 1.2. FTP Server

The FTP Server is better suited for:

- transferring larger numbers of files
- repeated file transfers in a short period of time
- preparing and managing ZTG packages

To use it, an external FTP client is required. Commonly used options include:

- FileZilla (PC / Mac / Linux)
- WinSCP (PC)

## Important notes

- Both services support **only one active connection at a time**
- The FTP server supports **Active (PORT) mode only**
- **Passive (PASV) mode is not supported**

These limitations should be taken into account when configuring FTP clients or when multiple devices attempt to connect simultaneously.

### 1.3. WiFi module firmware update

Consoles that were not originally shipped with firmware v1.13 will likely have an older version of the WiFi module firmware.

Units shipped with v1.13 (or newer) already include the updated version.

The update can be performed directly from the WiFi settings dialogue on the console.

Newer versions provide:

- **mDNS support** (easier access without needing to know the IP address)
- **faster file transfers**

Updating the WiFi module firmware is recommended for the best experience.

## 2. ZX Touch FX System

This firmware introduces the ZX Touch FX System, a real-time visual enhancement layer applied on top of the emulator.

It enables advanced visual transformations without modifying the original game, allowing the appearance to change significantly while the gameplay remains exactly the same.

The system is built around several components:

- Colour palette control
- Edge colour shader
- Foreground transparency
- Background images
- FX Manager (scene-based control)

These elements form a layered system that processes each frame while the game continues to run exactly as on original hardware.

### *Scene-based FX (FX Manager)*

FX Manager allows different visual configurations to be applied automatically depending on the current screen.

Instead of using a single visual setup for the entire game, the system detects predefined screen patterns (Markers) and switches between stored FX configurations (Actions).

This enables:

- different visuals for menus and gameplay
- level-specific backgrounds
- context-dependent visual transitions

## 2.1. Visual comparison examples

The following examples illustrate the difference between the original display and FX-enhanced output.



#### 4. Manic Miner

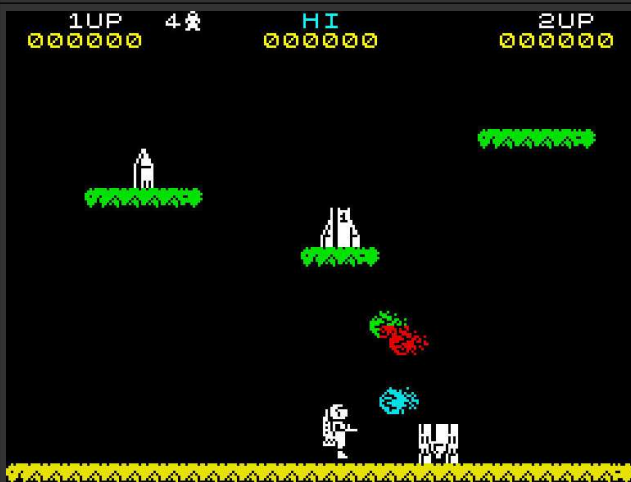


Original



ZX Touch FX

#### 5. Jetpac



Original



ZX Touch FX

#### 6. Match Day II



Original



ZX Touch FX

## 2.2. FX-ready game packages (ZTG files)

Alongside this firmware release, a collection of FX-ready ZTG files will be available on the official website.

These packages include:

- full FX configurations
- background images and visual assets
- predefined FX Manager logic

To comply with copyright restrictions, the original game files are not included.

Users need to provide their own legally obtained game files and integrate them into the ZTG package. The procedure is described in the **FX Guide**.

## 3. exFAT SD card support

Previous versions of ZX Touch supported only FAT32 formatted SD cards, which effectively limited SD card capacity to 32GB.

Firmware v1.13 now adds support for exFAT formatted SD cards, allowing the use of larger capacity cards beyond the FAT32 limitation.

Please note that this update applies only to the main ZX Touch firmware. The FUT (Firmware Update Tool) application remains a separate internal application and does not currently support exFAT cards. Firmware updates performed through FUT must therefore still use a FAT32 formatted SD card.

## 4. Expanded dashboard system and circular navigation

The maximum number of user dashboards has been increased from 50 to 100.

In addition, dashboard navigation is now circular. When navigating past the last dashboard, ZX Touch automatically jumps back to the first dashboard. Likewise, navigating left from the first dashboard immediately jumps to the last one.

This improvement was introduced because some users maintain very large dashboard collections.

Circular navigation significantly reduces the time required to reach a desired dashboard, especially when many dashboards are present.

## 5. Hidden macOS system files are now filtered in the file browser

ZX Touch no longer displays hidden files, system files or files and folders whose names begin with a dot (.) in the file browser.

This change was introduced because macOS automatically creates additional hidden files and folders on FAT32 and exFAT SD cards, such as *.DS\_Store*, *.Spotlight-V100*, *.Trashes* and *.\** files.

These files are not part of the user's game collection, but previously appeared in the browser and could cause confusion, especially for users who prepared their SD cards on a Mac computer.

The file browser now automatically filters these entries, resulting in a cleaner and easier-to-navigate game list.

## 6. Documentation

This release is accompanied by updated documentation:

- User Manual v1.13
- FX Guide