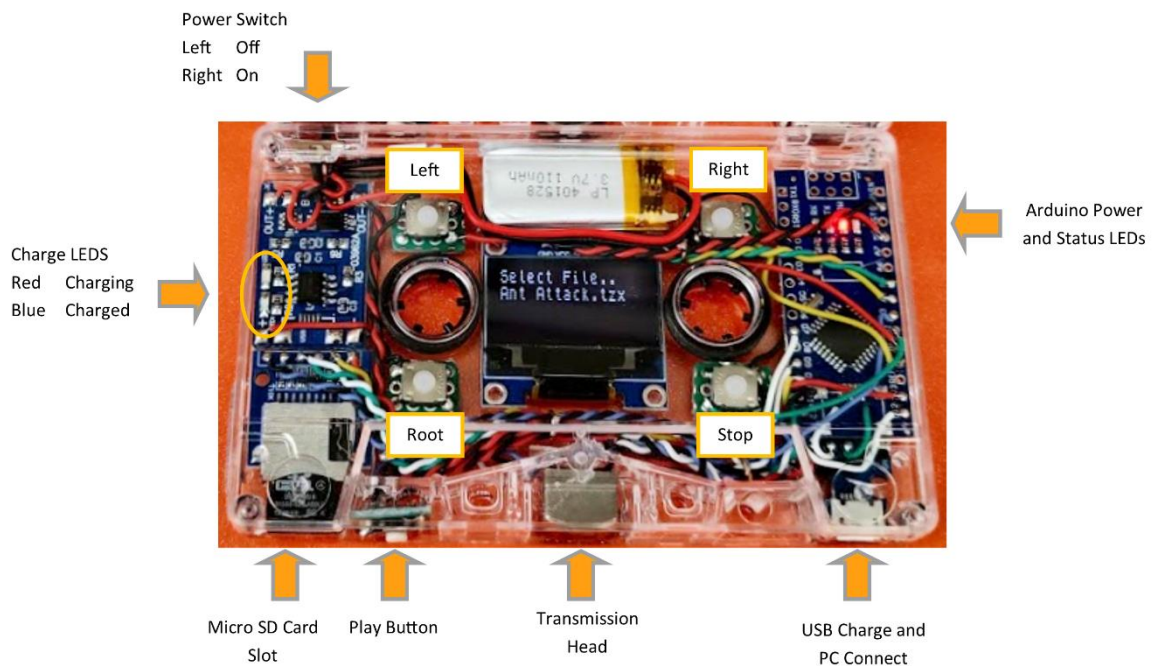


TZXCassette User Manual

V0.2 - Stuart Brand

The TZXCassette is a modification of the original, and excellent TZxDuino by Andrew Beer and Duncan Edwards. This document assumes some familiarity with the TZxDuino as this will describe the differences in use between the TZxDuino and the TZXCassette.

Layout and controls



Quick Start

Charge

Plug a Micro USB plug into the USB Charge port on the underside of the Cassette shell. The charging LEDs will light red, for charging and blue when the charging has completed. Cassette shells were not designed to be robust so care will need to be taken when plugging in/unplugging the device.

Insert SD Card

Insert a FAT formatted MicroSD Card with your chosen images into the SD card slot. Owing to the close fit, you can add a tab of tape to the SD Card which will make it easier to remove it and update the TZX files at a later date.

Controls.

The control system works by gently squeezing the shell from both sides in the position of the buttons. I have designed this to use the natural flex of the case and preserve the look. This becomes intuitive after a short time and feels like popping bubble wrap which is not unpleasant.

First run

Slide the power switch to the right, select the game with the left and right buttons by depressing and then insert this in the Deck of the +2. When the Spectrum is ready to load a game, depress the play

button on the cassette deck just far enough so that the erase head inside the deck nudges the play button. Your game should then load as it would from a normal cassette.

Additional information

Dev Units.

At the time of writing, Dev units are shipped with a spare piece of double sided tape. The Dev units have the play button and head attached more loosely than other units, this is so that the head and button depth can be changed to test with different systems. The head and buttons will stay attached but not rigidly so as the tape used is particularly adhesive.

Battery life

The battery life of the device has been calculated to be around 4 hours of solid use however, one unit has been left on overnight and still had enough power to load a game in the morning. As the device is only used to load a game, battery life is not a critical issue at the moment.

If left to run to a very low charge, the device may fail to work and will exhibit 'snow' on the screen. It is good practice to give the TZXCassette a quick charge before use.

Testing with other systems

This is currently only verified as working in the ZX Spectrum 128k +2 and if other cassette decks are to be used, care should be taken as these could jam in Auto Reverse decks with a self loading mechanism. It currently relies on a 'flaw' in the ZX Spectrum where the Audio from the deck is on all the time. This should work in basic mechanical decks where the audio circuitry is permanently connected.