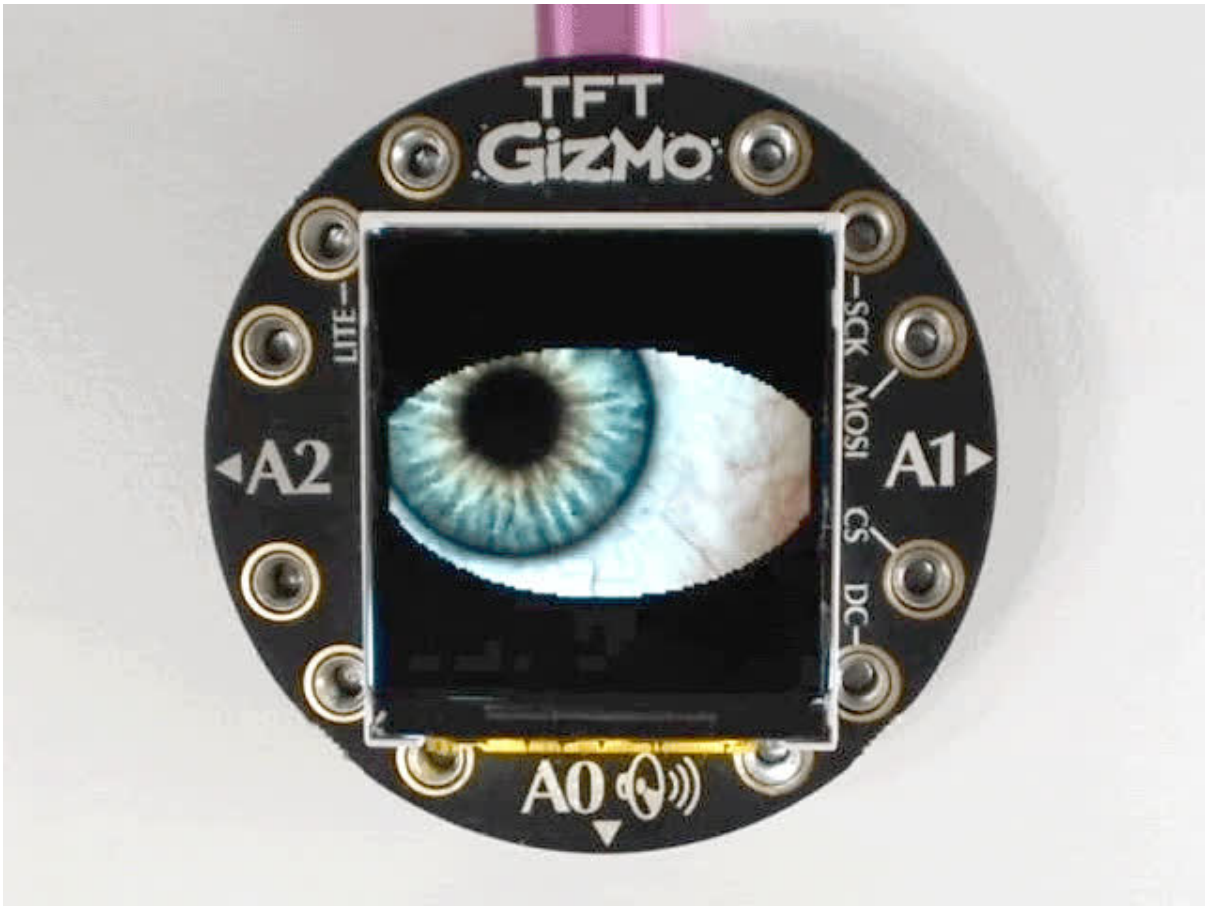
TFT Gizmo Animated Eye

Created by Phillip Burgess



https://learn.adafruit.com/tft-gizmo-animated-eye

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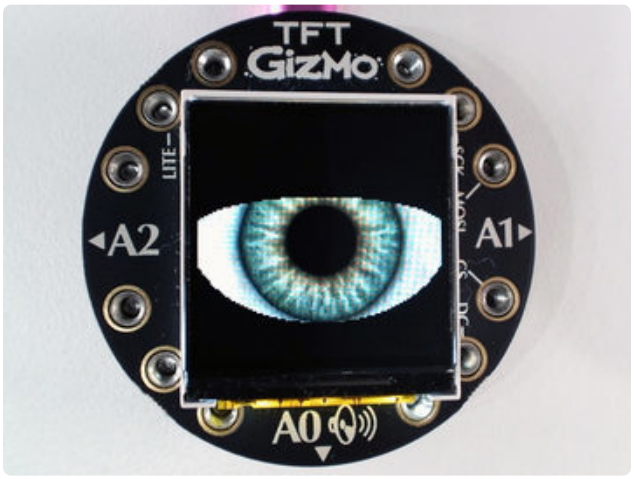
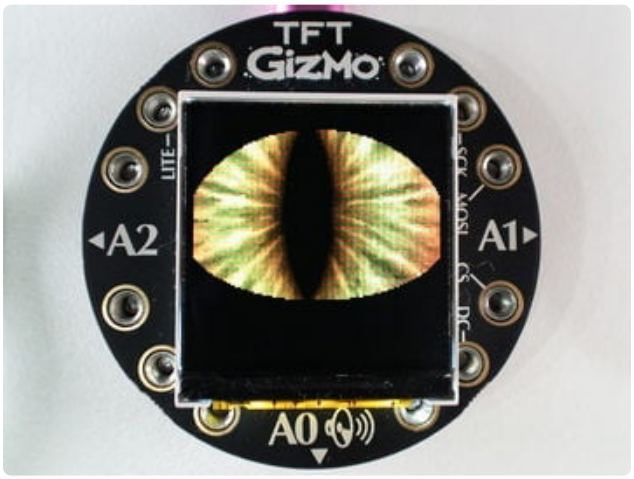
Ready-Made UF2 Files

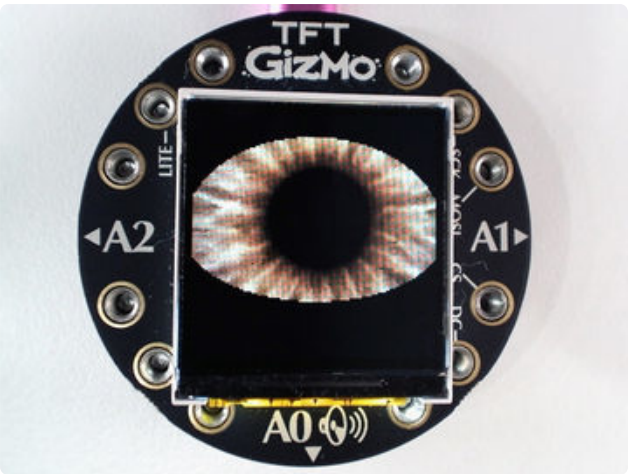
Among the appealing features of Adafruit's ARM boards is the use of the UF2 bootloader, which makes these boards show up as a small USB flash drive on your computer. Just double-tap the reset button and copy a pre-compiled binary file over to this drive...no need to install or compile anything special with the Arduino IDE! We have a few ready-made animated eyes for some of the Adafruit boards that have screens attached...



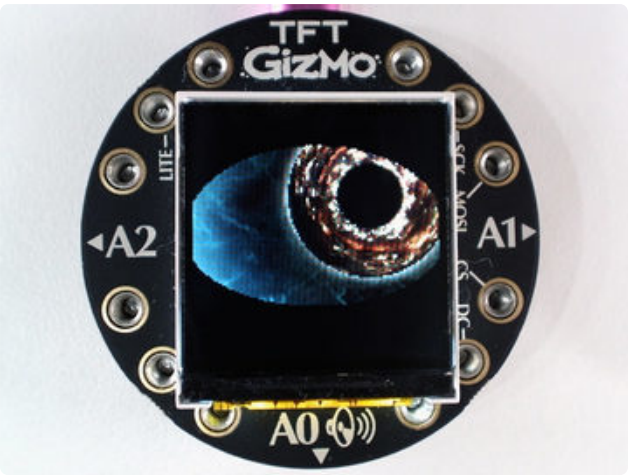
The hazel **Human** eye is used by default in our animated eyes code, with an anime-sized iris.



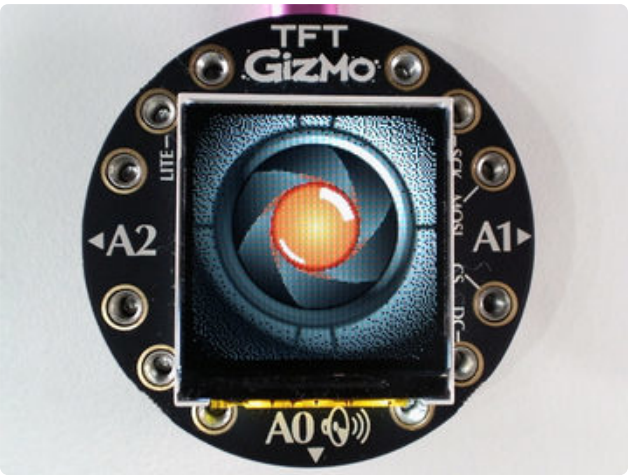
The **Dragon** eye demonstrates use of a slit pupil.



Some animals have such huge irises you rarely see the sclera (the white part of the eye). **No_Sclera** is an example eye for these situations.



The **Newt** eye originated from the Eye of Newt pendant guide (https://adafru.it/Cmd) ...but this one's trivial to install thanks to the UF2 bootloader.



The **Terminator** eye design originated with the Terminator Eyeball Upgrade guide (https://adafru.it/H9f)...but again, so much easier to install now.

Circuit Playground Bluefruit with TFT Gizmo

These are compiled for the **Circuit Playground Bluefruit** (http://adafru.it/4333) board with **TFT Gizmo** (http://adafru.it/4367) and **will not work on other boards**.

Currently, the pupil reacts to the light sensor...this is a bug, the pupil should have its own movements because the sensor is on the reverse side from the TFT display. These UF2s will be updated once it's resolved.

CPB_Eye_Human.UF2

https://adafru.it/H9A

CPB_Eye_Dragon.UF2

https://adafru.it/H9B

CPB_Eye_No_Sclera.UF2

https://adafru.it/H9C

CPB_Eye_Newt.UF2

https://adafru.it/H9D

CPB_Eye_Terminator.UF2

https://adafru.it/H9E

This is a highly specific Cybernetic Santa Claus version that includes both our Terminator eye graphics and the code to drive a strand of 30 NeoPixels (http://adafru.it/3919) plugged into the TFT Gizmo's A2 port.

CPB_Eye_Terminator_Santa_Lights.U

https://adafru.it/HoC

Circuit Playground Express with TFT Gizmo

Similar to the above, these are compiled specifically for **Circuit Playground Express** (http://adafru.it/3333) with the **TFT Gizmo** (http://adafru.it/4367); they **will not work on other boards**. The light sensor is not used here, since it's on the opposite side from the display...instead the pupil dilates on its own. This can all be changed if you compile from the source code.

CPX_Eye_Human.UF2

https://adafru.it/H9F

CPX_Eye_Dragon.UF2

https://adafru.it/Ha0

CPX_Eye_No_Sclera.UF2

https://adafru.it/Ha1

CPX_Eye_Newt.UF2

https://adafru.it/Ha2

CPX_Eye_Terminator.UF2

https://adafru.it/Ha3

Other Boards, and Customizing the Look

Ready-made eyes for the **Adafruit HalloWing M0** board are available in the HalloWing guide (https://adafru.it/CEs).

For the **HalloWing M4** and **MONSTER M4SK**, see the MONSTER M4SK guide (https://adafru.it/G8d). This one works a bit different...the code and graphics are separate pieces.

For everything else, including customizing the behavior and look of the eyes, you'll need to compile from source code, explained in the original "Uncanny Eyes" guide (https://adafru.it/Ha4).