

Wide scope

Since Graham's device can read any 3.5-inch floppy disks supported by the Greaseweazle, archiving is not restricted to the Amiga. Indeed, since Graham repurposed a 37-way D-type connector on the back of the disk duplicator unit to allow 5.25-inch and 8-inch drives to be connected, it is compatible with pretty much any retro machine you can think of.

It has also been found to work very well, with very few issues. So far, the failure rate for reading disks is just one percent and any problems have

With a 37-way D-type connector on the back, it is compatible with pretty much any retro machine you can think of

been easily fixed. "In October, I unveiled the disk archiver at the Vintage Computing Festival Berlin and had it running continuously for about twelve hours in total as a soak test," he reveals.

"On the second day of the show, the Greaseweazle was unable to read the disks and I initially thought that the drive heads were dirty or the drive had failed. But the floppy drive is on a bracket that can easily be removed for maintenance, so I looked at the drive and there was a disk label on top of the drive spindle that prevented the disks from spinning. Once removed, everything worked again."

Graham is now busily going through the archived disks in the hope of finding some treasure among his collection – there's always a chance that disks obtained from others contain long-forgotten files. "I have not found anything rare or sought after at the moment, but I am checking the image files and there is still lots to do," he says.

 This is the disk duplicator mechanism being used by Graham, complete with a 3.5-inch floppy drive. Other size drives can be added.

Floppy Disk Archiver



A Raspberry Pi 3 has been connected to the serial interface of an old disk duplicator. When it is turned on, the Raspberry Pi is able to issue serial commands via a Python script, but first it needs some floppy disks to work with.



D2 The old disk duplicator came with two attachable hoppers, each capable of holding 50 floppies. The disks are stacked in the input hopper and the Raspberry Pi controls when a disk is inserted into the duplicator's built-in disk drive.



D3 The Greaseweazle device extracts the raw flux transitions from a drive to capture the disk format and sends the data for storage on the Raspberry Pi. The disk is ejected and a spring-loaded mechanism in the output hopper limits its fall.



Be careful when handling this project because it has moving parts. Children should be supervised.