# Contents

➤ Issue 125 ➤ January 2023

#### Cover Feature

28 Raspberry Pi Starter Guide

#### Regulars

**92** Your Letters

**97** Next Month

**98** The Final Word

#### **Project Showcases**

**08** K-9

Maka Niu

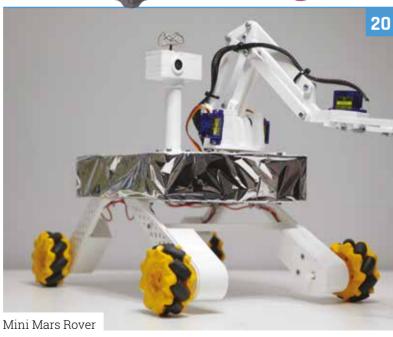
Pico Plant Waterer

Mini Mars Rover

**22** PiCar



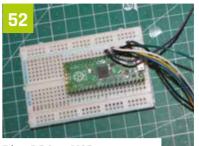


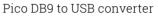


The MagPi magazine is published monthly by Raspberry Pi Ltd. Publishers Service Associates, 2406 Reach Road, Williamsport, PA, 17701, is the mailing agent for copies distributed in the US. Application to mail at Periodicals prices is pending at Williamsport, PA. POSTMASTER: Send address changes to The MagPi magazine c/o Publishers Service Associates, 2406 Reach Road, Williamsport, PA, 17701.

#### **Tutorials**

- **48** Get started with command line
- **52** Build a DB9 to USB converter
- **56** Watch your aquarium anywhere
- **60** Using Raspberry Pi in kiosk mode
- **66** Build a Pico W web app







The Big Feature



Get creative with Raspberry Pi Pico

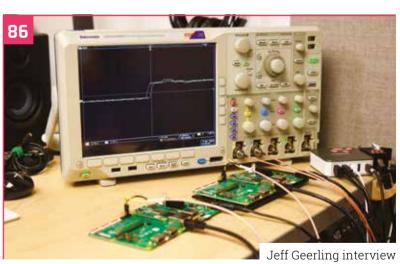
## **Reviews**

- **78** ReTerminal Expansion E10-1
- **80** RelayFi
- **82** Top 10 Advanced projects
- **84** Learn web design

### Community

- **86** Jeff Geerling interview
- **88** This Month in Raspberry Pi







DISCLAIMER: Some of the tools and techniques shown in The MaqPi magazine are dangerous unless used with skill, experience, and appropriate personal protection equipment. While we attempt to guide the reader, ultimately you are responsible for your own safety and understanding the limits of yourself and your equipment. Children should be supervised. Raspberry Pi Ltd does not accept responsibility for any injuries, damage to equipment, or costs incurred from projects, tutorials or suggestions in The MagPi magazine. Laws and regulations covering many of the topics in The MagPi magazine are different between countries, and are always subject to change. You are responsible for understanding the requirements in your jurisdiction and ensuring that you comply with them. Some manufacturers place limits on the use of their hardware which some projects or suggestions in The MagPi magazine may go beyond. It is your responsibility to understand the manufacturer's limits.