E8.2

UNIT E8 · WORKSHEET

Outputs and time delays

UNIT PROGRESS

Core BUILD THE BASICS

C1 **State** 2 s in milliseconds. **[1]**

C2 **State** the symbol for 'Switch on pin 4'. **[1]**

C3 **State** 1.5 min in seconds. **[1]**

C4 **State** 750 ms in seconds. **[1]**

C5 **State** 3 min in seconds. **[1]**

C6 **State** 0.2 s in ms. **[1]**

C7 **State** the symbol used for 'Switch off pin 7'. **[1]**

Stretch GO FURTHER

S1 **Complete** the flowchart for: amber lamp (pin 5) on for 3 s, then green lamp (pin 4) on for 10 s, then all off. **[5]**

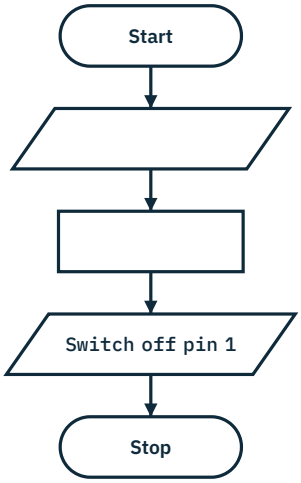
Outputs and time delays

S2 **Calculate** the total time: on 0.5 s, off 250 ms, on 2 s. **[2]**

S3 **Complete** a flowchart for a traffic light: red (pin 5) 5 s, red + amber (pin 6) 2 s, green (pin 7) 5 s, then stop. **[6]**

Exam Ready QUALIFICATIONS SCOTLAND STYLE

E1 **Complete** the missing steps in this flowchart. A beacon on pin 1 flashes once: on for 250 ms, then off. **[2]**



Outputs and time delays

E2 A ferry ramp beacon (pin 4) at Strathmore (fictional) comes on for 1 min, then a horn (pin 3) sounds for 2 s, then both stop. **Complete** the flowchart. **[5]**

E3 **State** 'pause 1500' as a flowchart delay. **[1]**

Total: 28 marks. Use the Data Booklet. Show your working and give units.