Dial bit datasheet

The dial bit is an input bit that allows a user to set a level or number manually.

The dial bit rotates from 0 to 280 degrees. The reading from the dial bit is its position in degrees. If the dial is set halfway then the reading from the dial bit is 140. If the dial is turned all the way up, then the reading from the dial bit is 280.
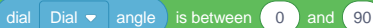
Use in ports	Stencil guide	Bit type	Block category
0 - 3	③	Input	Sensing

Programming blocks

The programming block for the dial bit is a sensing block that contains a value (dial position in degrees) so it can be used with an operator block such as '() < ()'. The operator block can then be used with control blocks, such as 'if<>then' or 'wait until<>' blocks.
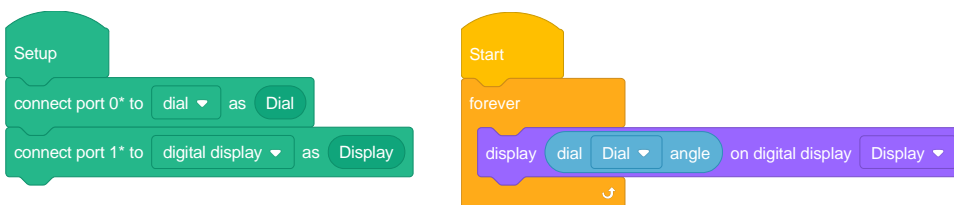
`dial  -▼  angle`

Use the operator block '() is between () and ()' to use the dial bit as a selector knob.

`dial  Dial ▼  angle  is between  0  and  90`

Example program

This sample program will send the dial bit's reading to the digital display bit. Rotating the dial will show the full range of the dial (0 to 280).

```
Setup
connect port 0* to  dial ▼  as  Dial
connect port 1* to  digital display ▼  as  Display
```

```
Start
forever
display  dial  Dial ▼  angle  on digital display  Display ▼
```

In the real world

Dials are used in inventions where the user needs to set a level or a threshold.

An example of setting a level would be the speed of a fan. An example of setting a threshold would be the temperature on a climate-controlled air conditioner, if the room temperature rises above the dial set threshold, then the air conditioner starts to cool the room.