Globisens Xploris Data Acquisition and Processing System User Guide

Contents

1 Globisens Xploris Data Acquisition and Processing System
2 Product Usage Instructions
3 Unique STEAM solution
4 Xploris – ports and controls
5 Hardware features
6 XploriLab – full suite of STEAM apps
7 For science & math
8 For coding
9 Pedagogic coverage
10 FCC Statement
11 Documents / Resources
11.1 References
12 Related Posts

Globisens Xploris Data Acquisition and Processing System

Specifications

- Full color 256 pixels display
- 4 sensors select keys
- Distance sensor
- USB-C port
- Sound sensor
- Voltage sensor, Voltage output source, Dry contact switch
- On/Off and 2 display keys
- 2 Robotics Servo engine output
- Temperature probe input
- Light sensor
- Speaker

Product Usage Instructions

Sensing & Data Logging
Xploris comes equipped with 5 sensors: Light, Temperature, Sound, Distance, Voltage. You can view the numeric sensor value and sensor bar graph on the display.

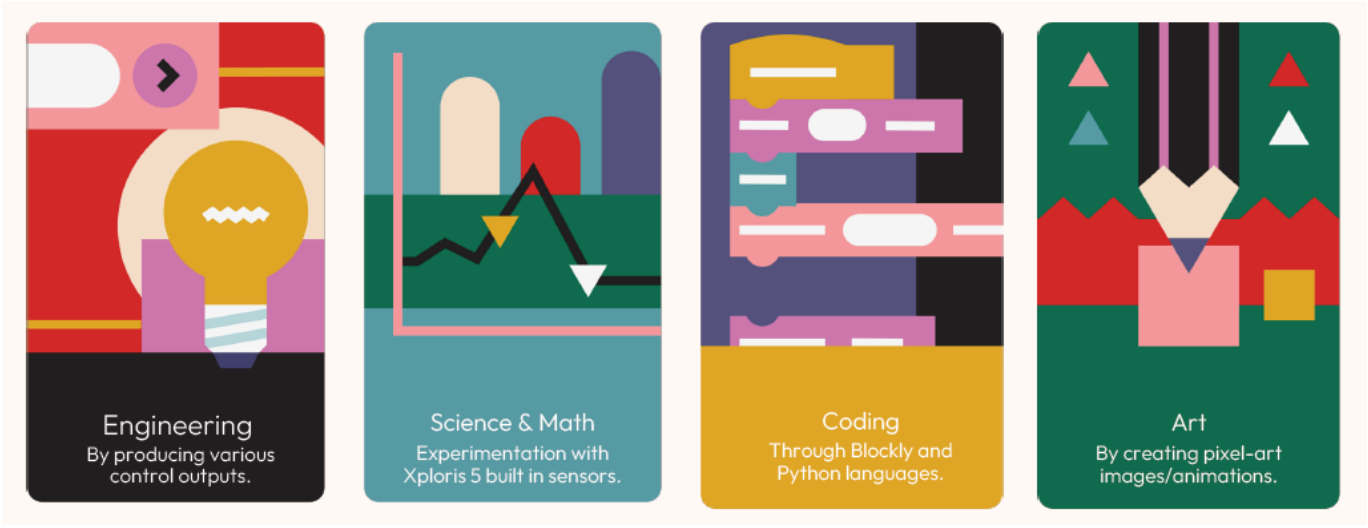
Art
The device features a 16×16 RGB LED matrix for creating graphics and animations. Use the pixel matrix to unleash your creativity in pixel art and animations.

FAQ
Q: What can I do with Xploris?
A: Xploris offers an integrated end-to-end STEAM experience covering science & math, coding, art, and control & engineering. You can create pixel art animations, experiment with sensors, code in Python and Blocks, and more.
Q: How many sensors does Xploris have?
A: Xploris is equipped with 5 sensors: Light, Temperature,Sound, Distance, and Voltage.

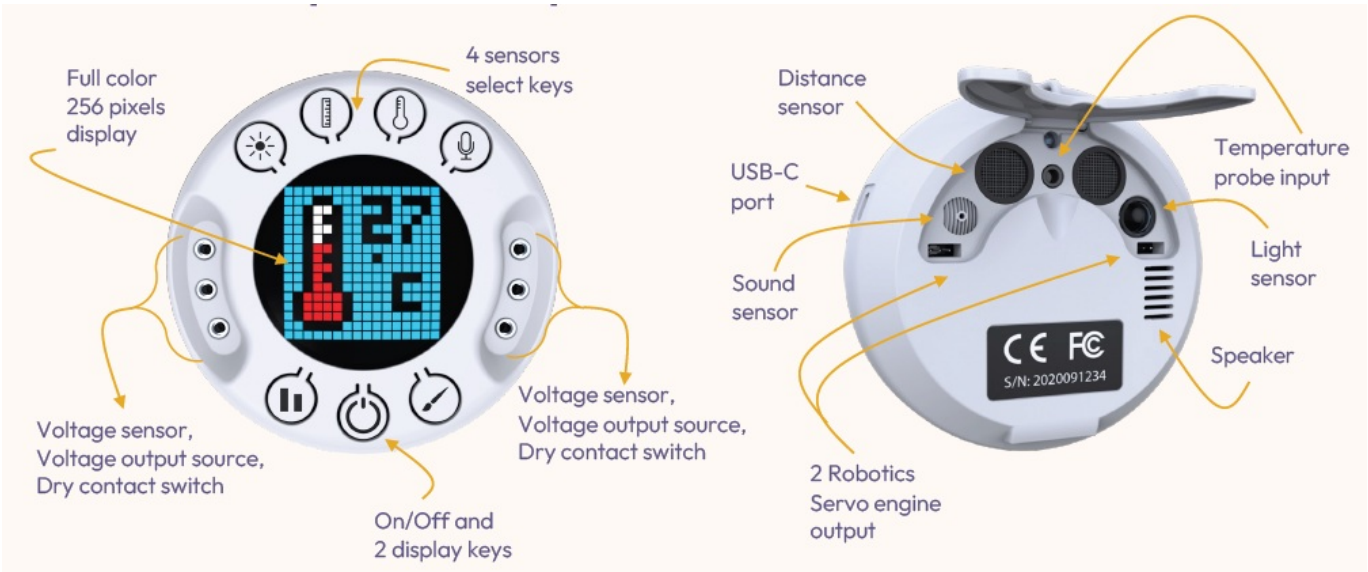
Xploris
One stop shop for k-6 STEAM

Unique STEAM solution

Xplrois does it all: An orchestra of STEAM learning in a compact, hand-held disc



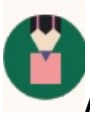
Xploris – ports and controls



Hardware features

Sensing & Data logging

- 5 sensors: Light, Temperature, Sound, Distance, Voltage.
- Displaying numeric sensor value and sensor bar graph.



Art

- 16×16 RGB LED matrix.
- Using the full color pixel matrix for creating graphics and animations.

Coding

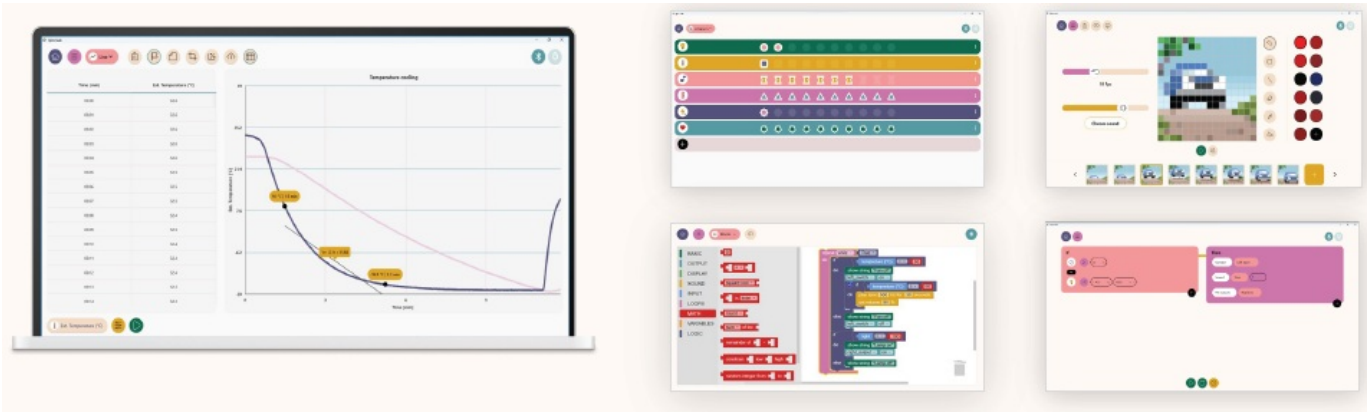
Internal processor directly supporting Python and Blocks.

Control

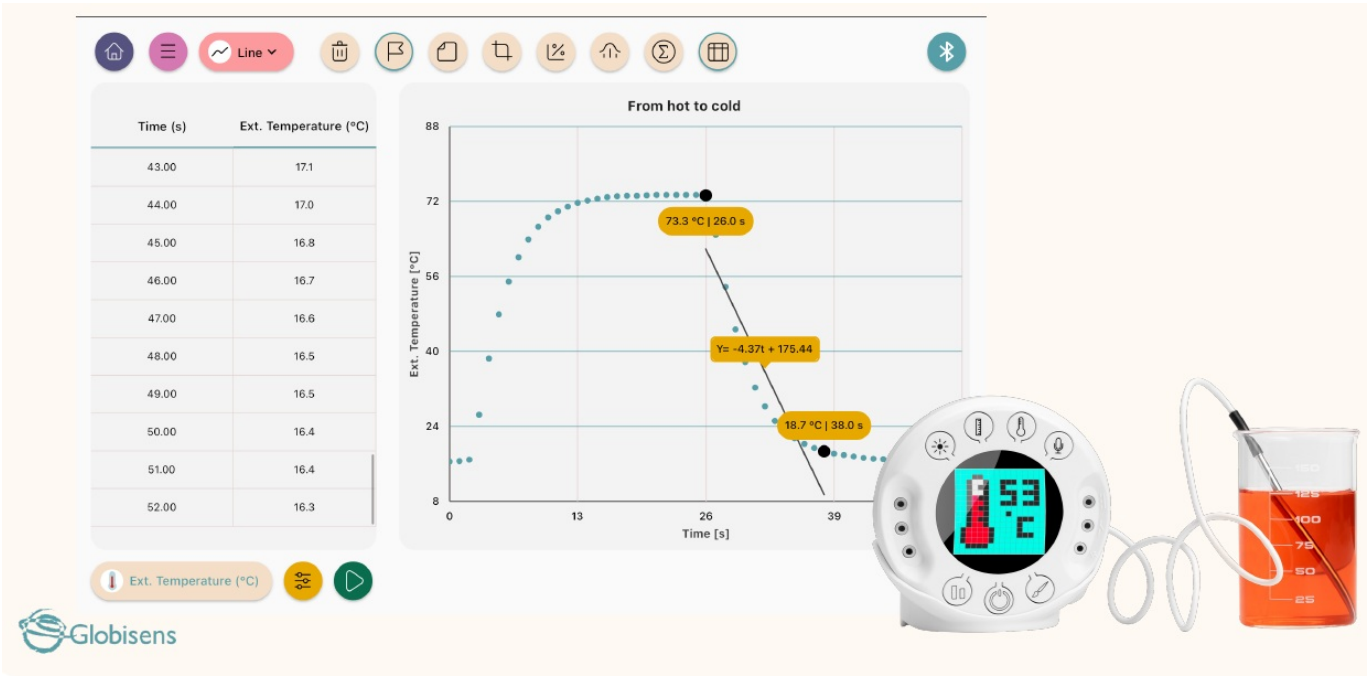
- 2 on/off outputs.
- 2 voltage output.
- 2 servo engine outputs.

XploriLab – full suite of STEAM apps

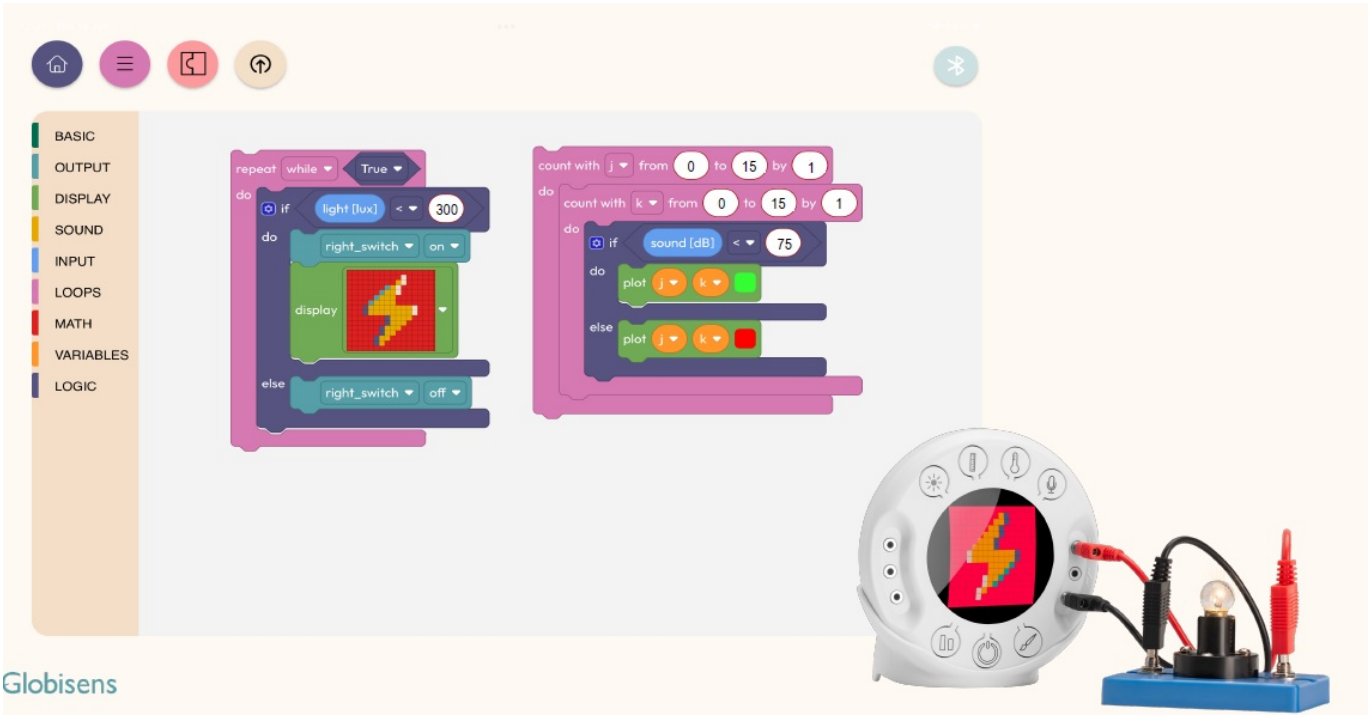
Science senssing, datalogging, coding, control and art.



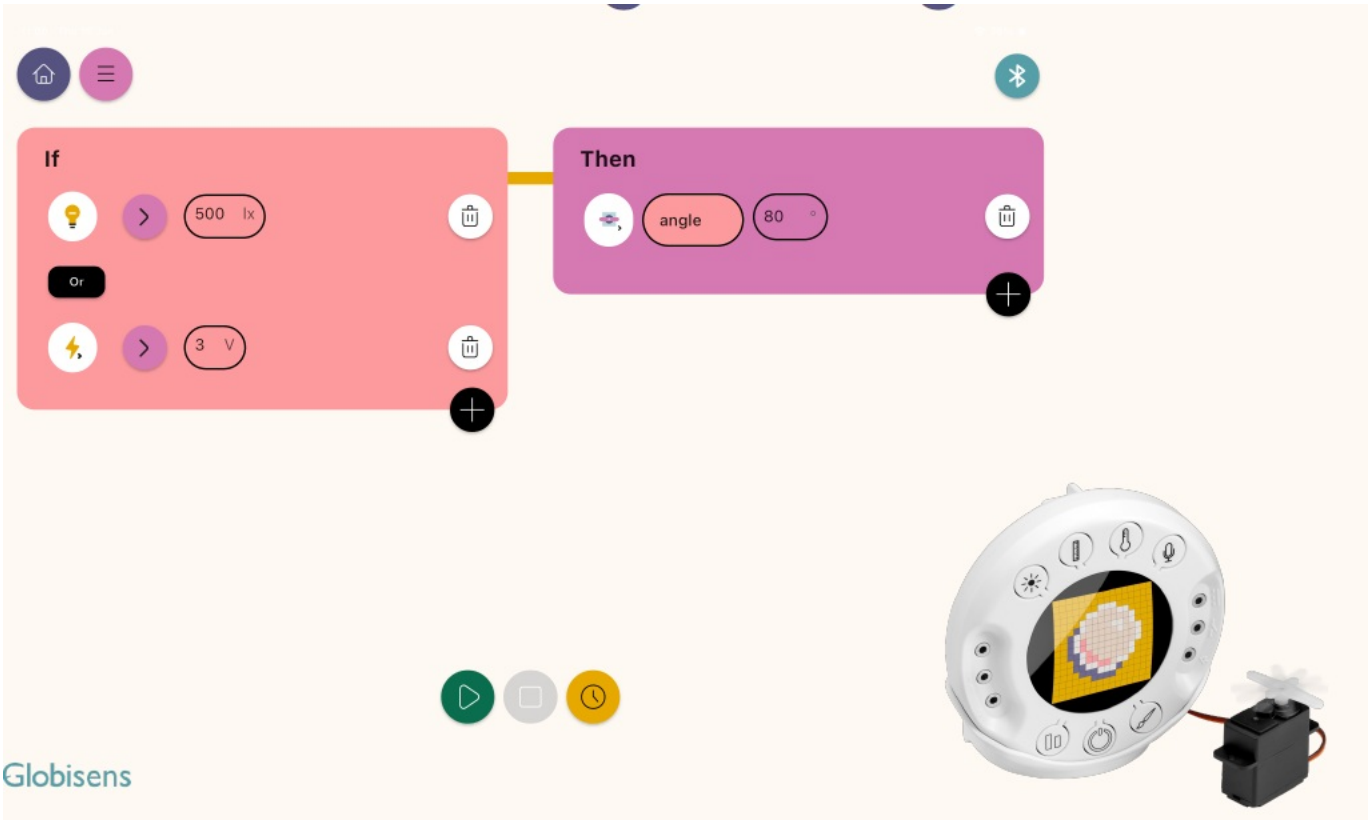
For science & math



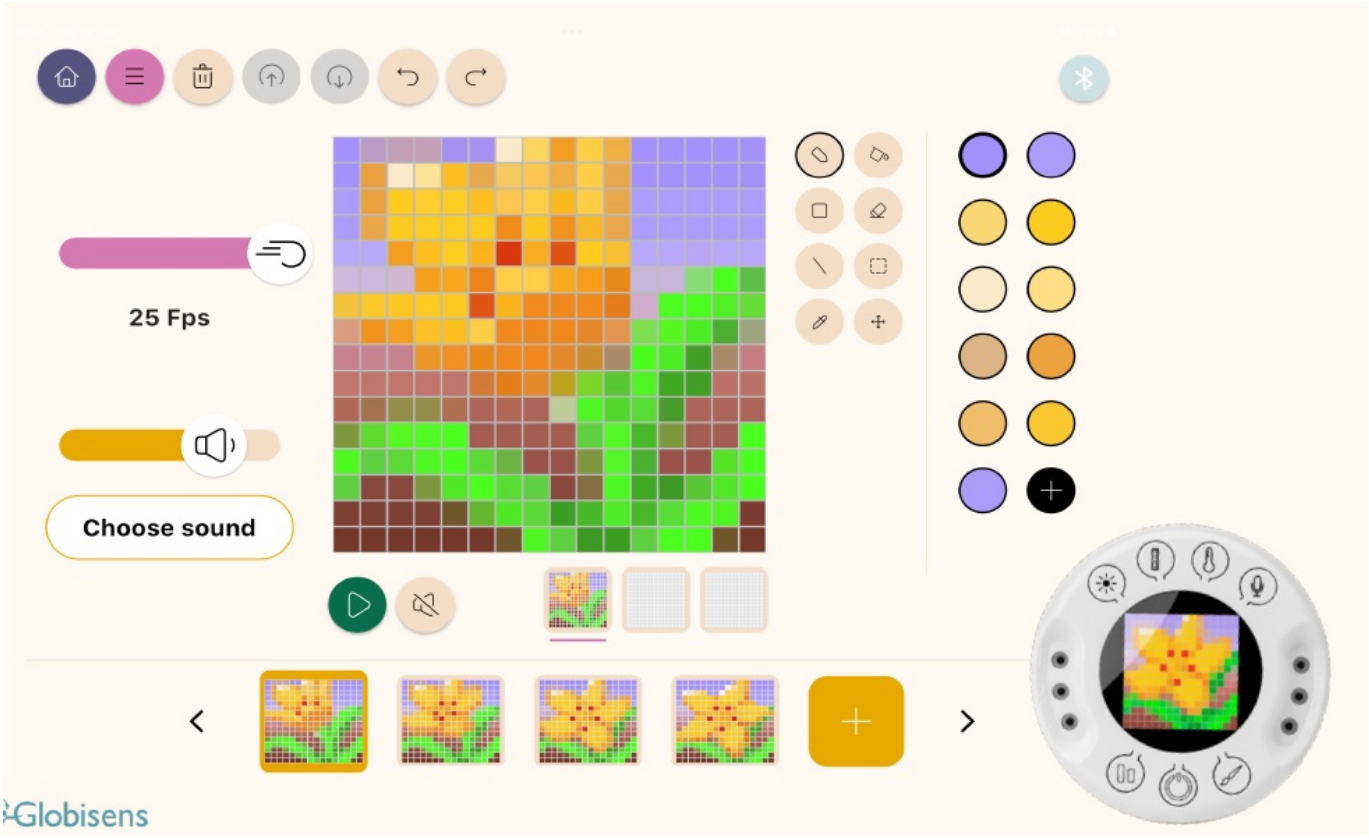
For coding



For control & engineering



For art



Pedagogic coverage

Full integration of all STEAM subjects

Science & Math

- Data visualization: gauges, pictographs, bar graphs, tables, line graphs.
- Data analysis: markers, annotations, linear regressions, Export to EXCEL.

Art

- Introduction to: colors, drawing, pixel art and character creation.
- Covering: frame by frame animation, shapes and geometry, sensors and code controlled animation.

Coding

- Platforms: Blockly, and Python editor.
- Covering: data types, variables, logical operators, If/else conditions, loops, Input and output operations.

Control

- Method: sensors based output levels.
- Controlling: animation speed, servo speed, servo angle, contact open/close, 5V output on/off.

Xploris offers students an integrated end-to-end STEAM experience, from creating a pixel art flower animation to apply coding that opens the flower's leaves when sunlight is projected on a light sensor"

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Thank you!

Documents / Resources

	Globisens Xploris Data Acquisition and Processing System [pdf] User Guide 2BH2L-XPLORIS, 2BH2LXPLORIS xploris, Xploris Data Acquisition and Processing System, Xploris, Data Acquisition and Processing System, Acquisition and Processing System, Processing System, System

References

- User Manual