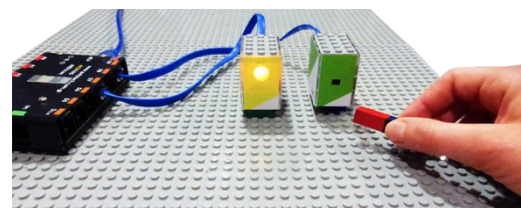


S1 Basic set configuration



S1 is the **basic set configuration** that includes Input and Output devices useful to understand **programming functions, design and construct control projects** in a step by step process.

With this set, students explore programming using all functions and achieve a very high first level of programming and computer control.



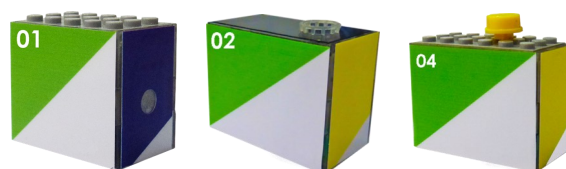
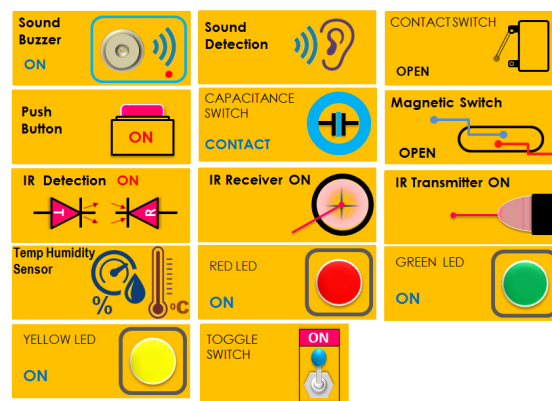
The set includes:

- ▶ **ARDicon didactic application**, an **icon** and **logic block** driven programming application that makes program coding so **simple** to understand and **easy** to implement as a **game**. See next page for indicative project themes.
- ▶ **ARDicon controller**, an **Arduino ARM CPU** based controller, especially designed for **plug and play** setup of circuits that needs no wiring or electronics knowledge. Connects to any PC or Android PAD. No wiring, no “spaghetti” development boards, no electronics background needed.
- ▶ **Electronic input/output** sets of **devices** in **building block cases**, which allow the students to be trained in the **basics of programming** and **computer science** while create their own constructions and models with simple plastic, low cost building bricks. See the table below.
- ▶ **C-STEAM, a didactic process** which, in parallel to the computer programming teachings, is educating students by exploring important principles of Science, Technology, Engineering, Arts and Math through a plethora of unique single or team oriented projects and tasks while introduces the students to the algorithm thinking levels for programming.



S1 BASIC KIT	Pcs
ARDicon Controller	1
ARDicon Software License	1
Instruction guide (electronic form)	1
UTP cables	3
USB Cable	1
Set of SMART:blox devices:	
SB 01 Sound Buzzer	1
SB 02 Analog Sound Sensor	1
SB 03 Contact switch	1
SB 04 Push Button	1
SB 05 Capacity Sensor	1
SB 06 Magnetic Reed Switch	1
SB 07 IR Object Detection Sensor	1
SB 08 IR Receiver	1
SB 09 IR Transmitter	1
SB 10 Temperature & Humidity Sensor	1
SB 11 Red LED	1
SB 12 Green LED	1
SB 13 Yellow LED	1
SB 14 Toggle switch	1
SB 50 RJ 11 Adapter Universal	1

For each device in the ARDicon database there is a specific icon to be used. Each device has a separate icon also for describing its state, for example ON or OFF, High or Low.



S1 Tutorial & Project Themes



Below are **indicative project** and **tutorial themes** that can be performed using the S1 basic set:

Tutorial Themes

- Programming Digital Input/ Digital Output
- Programming Analog Input/ Digital Output
- Smart Home Light Control - Single Input/Single Output
- Smart Home Light Control - Single Input/Single Output
- Smart Home Light Control - The “else” Condition
- Smart Home Security Control- The “else” Condition
- Smart Home Light Control - The “for” Iteration
- Smart Home Security Control - The “for” iteration
- Pedestrian Crossing Traffic Light - The “delay”
- Smart Home Security Control - The “while” iteration
- Smart Home Security Control - The “while” iteration
- Decibel Meter

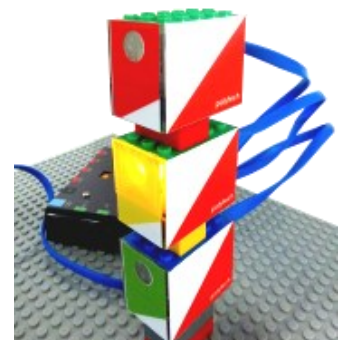


Project Themes

- Blinking light
- Flowing light
- Make a sound
- Sound-controlled lamp
- Contact detecting
- Button-controlled lamp
- Magnetic switch
- Temperature alarm
- Morse code
- Refrigerator Operation Lights
- Train Crossing Lights Control
- Refrigerator Door alarm system
- Traffic light

C-STEAM Level

- | C-STEAM | Level |
|---------|-------|
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | 1 |
| A | 1 |
| A | 1 |
| A | 1 |



Mathematics Project Themes

- Integer and Floating point
- Constants and Variables
- Addition
- Subtraction
- Multiplication
- Division
- Fractions
- Exponential Numbers
- Number root
- Arithmetic functions

C-STEAM Level

- | C-STEAM | Level |
|---------|-------|
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | BASIC |
| A | 1 |
| A | 1 |
| A | 1 |
| A | 1 |

