InO-Bot

User Guide for iOS

www.tts-shopping.com

InO-Bot

InO-Bot, full of inputs and outputs.

Contents

The InO-Bot app should be downloaded from the Apple App Store. InO-Bot is compatible with iPad 4 or newer (these devices have lightning connectors).

Bluetooth Connection

Note: InO-Bot does not needed pairing with an iPad. It should not be manually paired with one.

1) Switch on InO-Bot.
2) Launch the app.
3) The app should find and automatically connect to an available InO-Bot. Whilst it is connected that InO-Bot will not be available to other devices.

Advice when using a number of InO-Bots at the same time: Switch on all InO-Bots and all iPads. DO NOT open or launch the app. Open the app on one iPad only. That iPad will find an InO-Bot and connect to it. That pair of devices can then be used. Launch the app on another iPad and continue the process of launch and connect.

InO-Bot App Screen

This indicates an InO-Bo is connected. Tapping on this space will open the window shown.

Whilst InO-Bot is connected, readings from the sensors will be displayed on this bar.
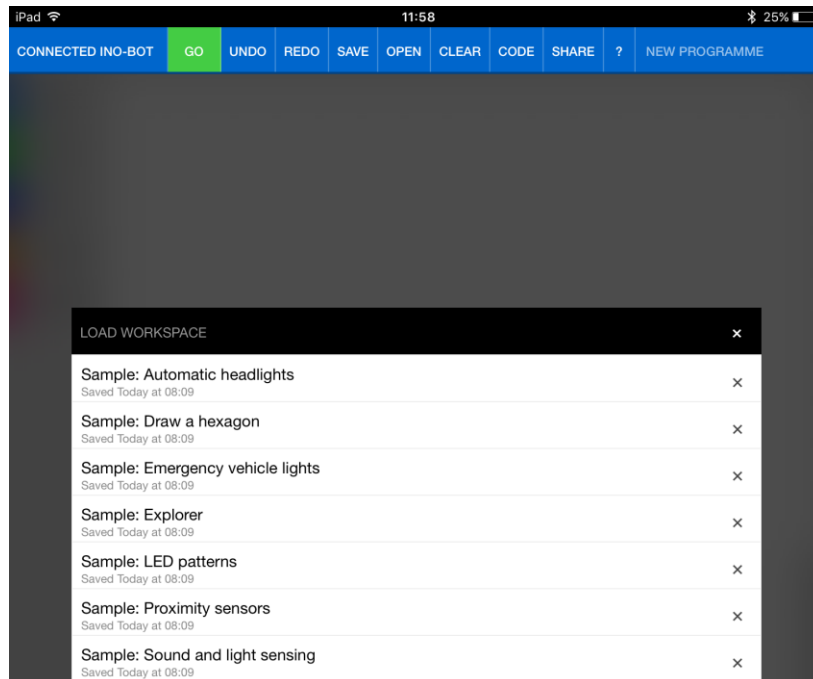
Corner proximity sensors and line follower sensors.
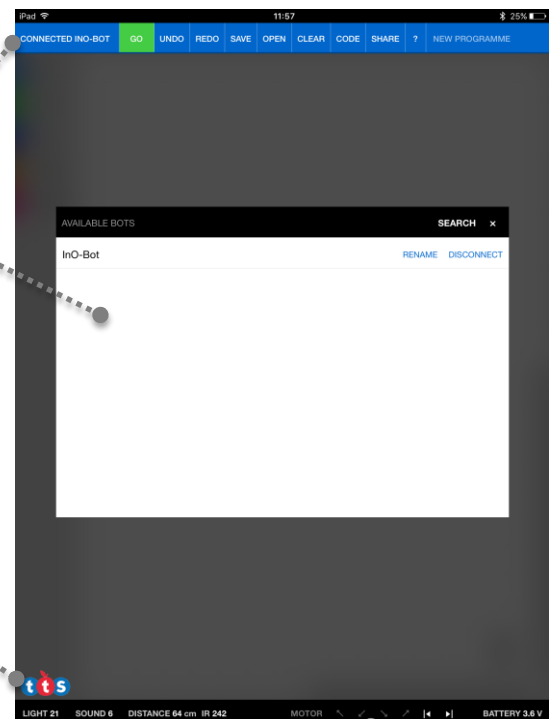
Sensor values

| Sensor	Value
Light	0 to 255
Sound	0 to 255
Distance	0 to 255
IR – Infrared	255 to 0 (lower values = more IR light)

Example Programs

There are a number of example programs. Tap on OPEN to access them.

| Program	Description
Automatic headlights	Makes the headlights light in duller light conditions.
Draw a hexagon	Lowers the pen holder and moves in a hexagonal shape.
Emergency vehicle lights	Flashes LED 1,4,5 and 8 red and blue.
Explorer	Moves around avoiding obstacles detected by the range finder.
LED Patterns	Lights the top LEDs in different colours.
Proximity sensors	Lights LED 1,4,5 or 8 when nearest corner sensor is triggered.
Sound and light sensing	Lights LED 4 and 5 at given trigger sound level and lights headlights at given trigger light level.

Blocks

Logic
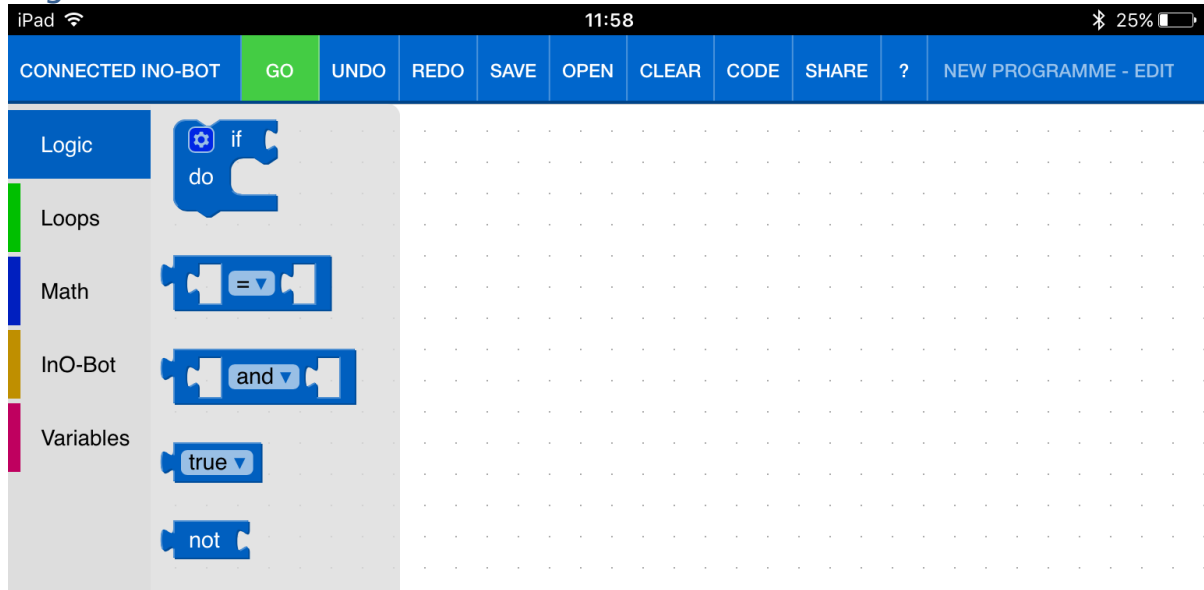
Modifying if Blocks

1. Drag an if block onto the workspace. Tap on the cog to open the options panel.
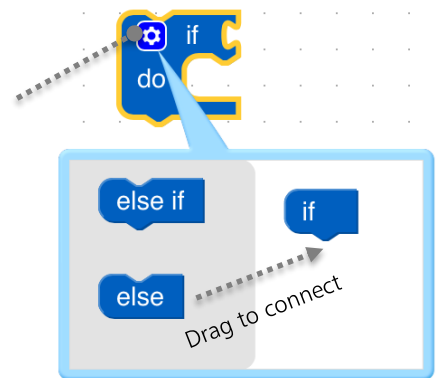
2. Tap on the cog again to close the option panel.
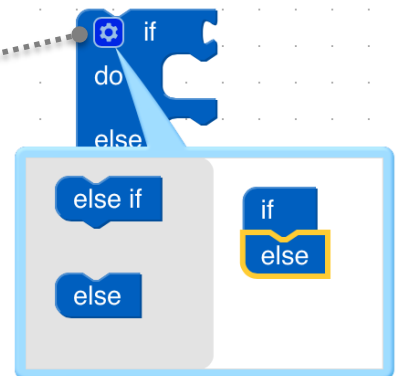
3. The modified if block will remain on the workspace.

Loops

Repeat forever

Math

CONNECTED INO-BOT   GO   UNDO   REDO   SAVE   OPEN   CLEAR   CODE   SHARE   ?   NEW PROGRAMME - EDIT

- Logic
- Loops
- **Math**
- InO-Bot
- Variables

Blocks:

- `0`
- `90° °`
- `1 + ▾ 1`
- `square root ▾ 9`
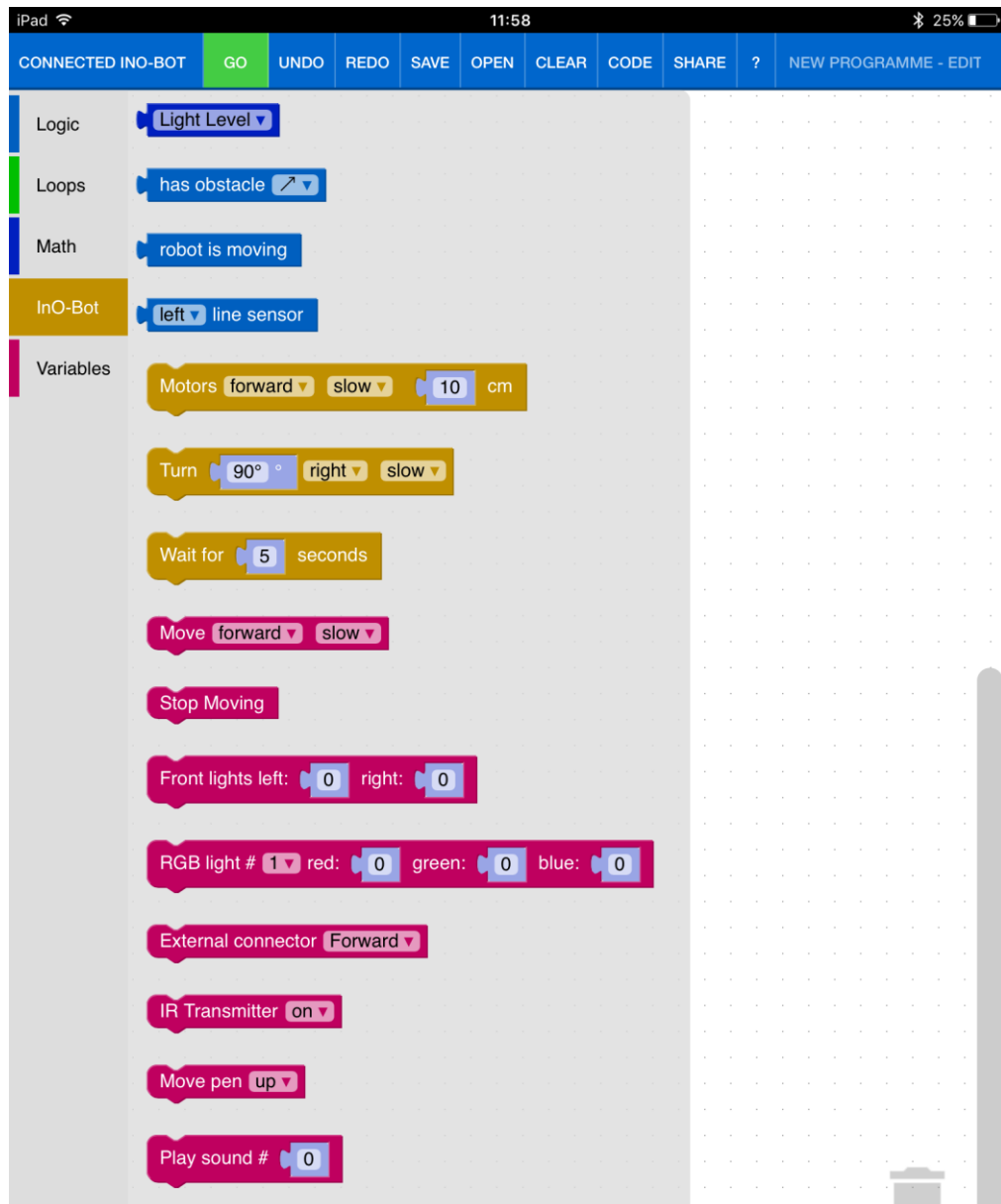- `sin ▾ 45`
- `π ▾`
- `0 is even ▾`
- `round ▾ 3.1`
- `remainder of 64 ÷ 10`
- `constrain 50 low 1 high 100`
- `random integer from 1 to 100`
- `random fraction`

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Command	Accepted Values	Note
Motors	0 +	127cm is the maximum single movement. Values greater the 127 will result in a stepped movement.
Turn	0 +	180° in the maximum single movement. Values greater than 180 will result in a stepped movement.
Front lights	0 to 10	
RGB light #	0 – 255	
Play sound #	0 - 29	See index of sounds later in this document.

Variables
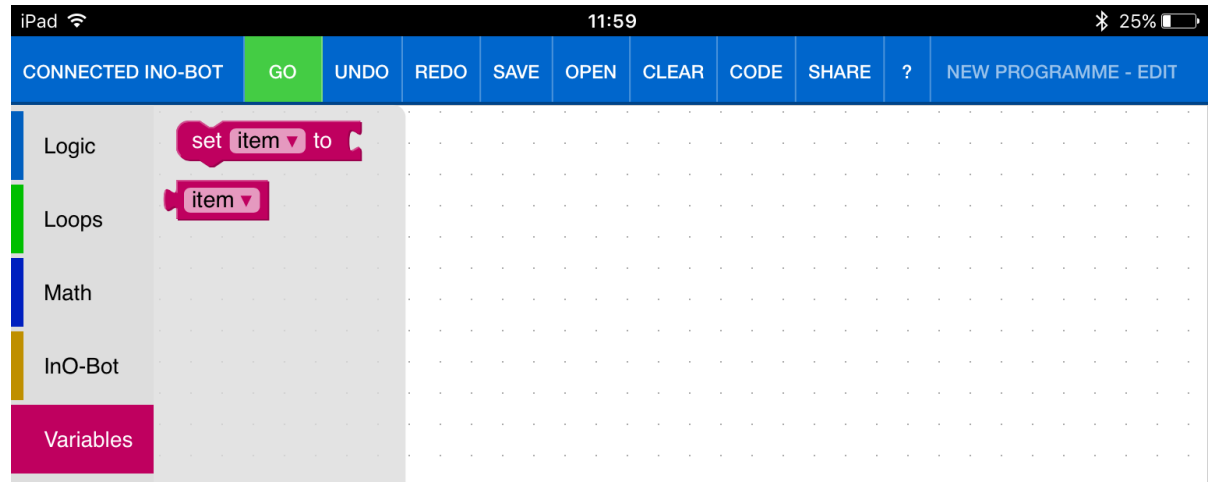
Sounds

Effect		Piano		Xlyo	
Index	Sound	Index	Sound	Index	Sound
0	1	10	a	17	1c
1	2	11	b	18	1d
2	3	12	c	19	1e
3	4	13	d	20	1f
4	5	14	e	21	1g
5	6	15	f	22	2a
6	7	16	g	23	2b
7	8			24	2c
8	9			25	2d
9	10			26	2e
				27	2f
				28	2g
				29	3a

Technical Support

Please visit www.tts-group.co.uk for the latest product information.

Email feedback@tts-group.co.uk for technical support.

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