InO-Bot

User Guide for iOS

www.tts-shopping.com
# InO-Bot

InO-Bot, full of inputs and outputs.

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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 need 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-Bot 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**

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>0 to 255</td>
</tr>
<tr>
<td>Sound</td>
<td>0 to 255</td>
</tr>
<tr>
<td>Distance</td>
<td>0 to 255</td>
</tr>
<tr>
<td>IR – Infrared</td>
<td>255 to 0 (lower values = more IR light)</td>
</tr>
</tbody>
</table>
## Example Programs

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

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

**Logic**

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**

```
repeat while true

do
```
Math

Logic

Loops

Math

InO-Bot

Variables

0

90°

1 + 1 = 1

square root = 9

sin 45

It

0 is even

round 3.1

remainder of 64 ÷ 10

constrain 50 low 1 high 100

random integer from 1 to 100

random fraction
Motors

0 +

127 cm 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

<table>
<thead>
<tr>
<th>Effect</th>
<th>Piano</th>
<th>Xlyo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Sound</td>
<td>Index</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>13</td>
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<tr>
<td>4</td>
<td>5</td>
<td>14</td>
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<td>5</td>
<td>6</td>
<td>15</td>
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<td>16</td>
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## Technical Support

Please visit [www.tts-group.co.uk](http://www.tts-group.co.uk) for the latest product information.

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

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