



Ruscool 64 IO

Version 1.0

User Manual

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Contents

Prerequisites	2
Ruscool 64 IO	3

Prerequisites

- A registered version of FSUIPC must be installed within the Flight Simulator software.
- If windows doesn't automatically install the driver, it can be found in the link below:
<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>
- Ensure the board is connected to the computer via a USB cable.

Ruscool 64 IO

The **Ruscool 64 IO** program allows the operation of a combination of inputs, outputs, and encoders. Note that encoders use two IO pins for incrementing and decrementing, so only 32 encoders could be operated - or 64 inputs/outputs.

After running the **Ruscool 64 IO Config** program and setting up how you wish to use the various inputs and outputs, and "saving" your settings, the main **Ruscool 64 IO** program is ready to use.

The **Ruscool 64 IO** program can be running before starting Flight Simulator as it will wait for a connection to the Flight Simulator software before the program continues.

The **Ruscool 64 IO** program will be minimised on the taskbar, because while you are flying your simulator it is not normally necessary to see this information. If required, you can bring it back to full size while you are setting up all of the various controls.

For the Outputs, the ON / OFF status of each item can be seen from the colour of the description, where it will be Green for ON and Red for OFF. The values to use for ON and OFF are set up in the **Ruscool 64 IO Config** program and are shown on this screen for your reference.

For the Inputs, the value is showing the status of the switch and the description will be Green for ON and Red for OFF.

Make sure that when you have finished viewing the data that the program is **minimised**, not closed, so that the program remains running.

The screenshot shows the 'Ruscool 64 IO - Board 1' window with a black background and white text. It is divided into eight panels, each representing a different bank of IO configurations. The status of each item is indicated by the color of the text: Green for ON, Red for OFF, and Black for unused or zero values.

BANK 1 - INPUT	BANK 2 - INPUT	BANK 3 - ENCODER E37	BANK 4 - OUTPUT
1 AP Master Switch 0	1 Engine 1 Starter Switch 0	1 AP Heading Value 339.99	1 AP Master Switch 0
2 Lights - Landing 0	2 Engine 1 Starter Switch 0	2 Autopilot Vertspeed	2 Flight Director Active 1
3 Lights - Navigation 0	3 Engine 1 Starter Switch 0	3 AP Airspeed Value 0	3 AP Heading Value 340
4 AUTOPILOT ON 0	4 Engine 1 Starter Switch 0	4 AP Altitude Value 0	4 Lights - Landing or Taxi
5 AutopilotHeading Hold 1	5 Engine 1 Starter Switch 0	5	5 Flight Director and Any
6 Pitot Heat Switch 0	6	6	6 Rotor Low RPM
7	7	7	7 Assorted Warning
8 Only if battery bus has 0	8	8	8

BANK 5 - OUTPUT	BANK 6 - unused	BANK 7 - OUTPUT	BANK 8 - INPUT
1 Engine 1 Starter Switch 2	0	1 Gear Position (Nose) 16383	1 Only if battery bus has 0
2 Engine 1 Starter Switch 2	0	2 Gear Position (Nose) 16383	2 Flight Director and Any 0
3	0	3 Gear Position (Left) 16383	3 0
4	0	4 Gear Position (Left) 16383	4 0
5	0	5 Gear Position (Right) 16383	5 0
6	0	6 Gear Position (Right) 16383	6 0
7	0	7	7 0
8	0	8	8 0