

# **QuickStart Guide**

#### **IPRE Personal Robot**

The IPRE personal robot for introductory computing is a Scribbler robot (manufactured by Parallax) augmented with the IPRE Fluke robot upgrade module.

#### Bluetooth

Name: IPRE-<Serial #>

PIN:1234



### **Getting Started**

- 0. Subscribe to the myro-users mailing list<sup>3</sup>
- 1. Install Myro software on your PC (see Readme.html on CD)
- 2. Insert 6 AA batteries into the Scribbler (rechargeable batteries work well!)
- 3. Plug Fluke into the Scribbler's serial port
- 4. Turn on power switch on Scribbler
- 5. Connect to the robot via bluetooth (see wiki<sup>2</sup> for connection instructions)
- 6. Double click the "Start Python.py" icon on your desktop
- 7. Enter from myro import \* in the Python window
- 9. Enter upgrade('scribbler') to install the IPRE firmware
- 10. Enter Bluetooth serial port (from step 5), e.g. COM40, when prompted
- 11. Enter initialize()
- 12. You are now ready to explore computer science with robots!

#### **Useful Web Links**

- www.roboteducation.org
- wiki.roboteducation.org
- 3. myro.roboteducation.org/mailman/list-info/myro-users



## **IPPP** Additional Materials

#### Institute for Personal Robots in Education

The Institute for Personal Robots in Education (IPRE) applies and evaluates robots as a context for computer science education. IPRE is a joint effort between Georgia Tech and Bryn Mawr College sponsored by Microsoft Research.



#### Desktop PC with Bluetooth

You will need a bluetooth enabled computer. If you don't have bluetooth built in, or want to extend the range, we recommend the Class-1 Azio USB bluetooth adapter.



#### Myro

To use the IPRE robot, you will need to run the installer for the programming language Python and the IPRE Myro Python library. Myro provides a student-friendly Python interface to the IPRE robot. Both are freely available on the web and can be installed from the CD.

#### Trouble with the Install?

We are very interested in improving our installation CD. If you have comments or questions about how the software install process works, please contact us: Email (Myro Mailing List):

myro.roboteducation.org/mailman/list-info/myro-users
Phone: (610) 526-5024



### Getting to Know Your IPRE Fluke

Red Bluetooth LED

indicates bluetooth transmission

Infrared Emiters right, center, left

Green Power LED PRE BLUETOOTH CAMERA DONGLE REV 6

Bluetooth PIN

Red User LED

Infrared Receiver Serial Number bluetooth name

#### Camera

Lens can be manually focused by turning the top of the lens **gently** in a clockwise or counter clockwise direction. Be sure to only turn the very top of the lens to prevent snapping the lens from the board.



Bright Red User LED

(blinking indicates low power)

Scribbler Serial Connection
Plug this connector into the serial port
of the scribbler.

Manufactured under license from the Georgia Institute of Technology.

#### **Regulatory Information**

FCC ID: VPU-4970726505



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.

NOTE: 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.

#### **RF Exposure**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.