



Southern Luzon State University
College of Engineering
Computer Engineering Department



USER MANUAL

VOICE-CONTROLLED SIGNAL LIGHTS

VEST FOR CYCLISTS

User Manual for Voice-Controlled Signal Lights Vest for Cyclist

Introduction

The Voice-Controlled Signal Light Vest is an innovative safety device designed to enhance the visibility and communication of cyclists on the road. This vest allows cyclists to indicate their intentions (turning, stopping, slowing down) through simple voice commands, improving road safety and reducing the risk of accidents.

Overview of Components

- **Power Button:** Located at the bottom of the device.
- **Type-C Charging Port:** Located near to the Power Button.
- **Battery Life indicator:** Indicates the charging status and power state.

Inserting and Removing the Main Device

- To insert the main device, unzip the zipper in the back of the vest the put it inside the pocket until it fits securely and then close the zipper.
- To remove the main device, unzip the zipper in the vest and pull out the main device.

Removing and Inserting the Microphone

- Unzip the zipper in the left part at the back of the vest to get/hold the port from the main device, then the hole at the upper part of the back of the vest put the wire connection of the microphone to connect to the port of the main device.
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Charging the Device

1. Remove the Microphone first and then the main device from the vest.
2. Connect the Type-C charging cable to the port on the device.
3. Plug the other end of the cable into the USB power source.
4. Observe the Battery Life indicator/LED indicator to check the charging status.

Charging Time

Approximately 4.5 hours

Powering On/OFF

To power On the device, just press the power on button at the bottom of the device.

To power Off the device, just press the power off button at the bottom of the device.

Activating Voice Commands

Ensure that the device is powered on. Voice control is active by default when the device is on.

List of Commands

- **“Right”** - Activates the right turn signal.
- **“Left”** - Activates the left turn signal.
- **“Stop”** - Activates the stop signal.
- **“Slow”** - Activates the slow down signal.
- **“Off”** - Turn off the signal.

Using the Commands

Speak clearly and directly towards the microphone. Ensure that your voice is enough for the device to detect or recognize.

Using the Signal Lights

- **Right Turn Signal** - Use the “Right” command to indicate a right turn signal.
- **Left Turn Signal** - Use the “Left” command to indicate a left turn signal.
- **Stop Signal** - Use the “Stop” command to indicate a stop signal.
- **Slow down Signal** - Use the “Slow” command to indicate a slow down signal.
- **Off Signal** - Use the “OFF” command to terminate the signal.

Duration of Signal Lights Display

- **Right signal light display** - 8 seconds
- **Left signal light display** - 8 seconds
- **Stop signal light display** - 3 seconds
- **Slow down signal light display** - No duration