

### Introduction

The Willow is a magnetic low force joystick that allows a user with limited arm strength to control a computer, gaming console, smart phone, or tablet.

This Quickstart Guide is meant to briefly introduce the functions and use of the Willow. For more detailed information, please consult the User Guide.



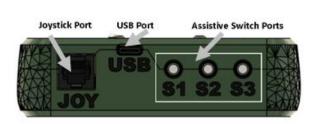
**User Guide** 

### **Features**











## **Setting up the Willow**

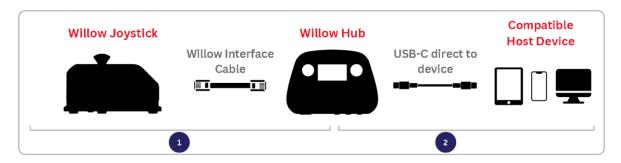
The following are the general steps needed to setup your Willow Joystick:

- 1. Mount Willow Joystick
  - a. Mounting adaptors are available
- 2. Mount Willow Hub
  - a. Hub stand is available
- 3. Connect Willow Interface Cable
- 4. Optional: Connect assistive switches to Willow Hub
- Connect the Willow Hub to the Host Device
- 6. Once powered, wait until device initializes before moving joystick.

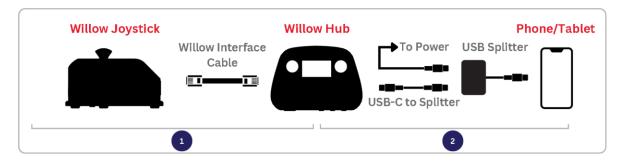


#### **USB Connections**

**For direct USB connection to the host device,** connect the appropriate USB cable from the Willow Hub into the host device. Use an adapter if necessary.

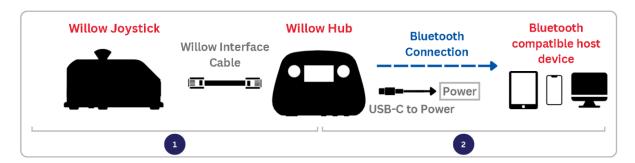


**For connection to the host device with an external power source,** plug a power splitting adapter into the host device and connect the Willow Hub and external power source to the splitter. Use an Adapter if necessary. **Required for iOS USB connection.** 



#### **Wireless Connections**

For wireless connection to the host device, plug the Willow Hub directly into any power source using the appropriate adapter as required. Change the operating mode to BT Mouse through the Hub Menu (See Input Mapping and Settings Menu Options). Find "Willow" in the host device Bluetooth menu to pair and connect.

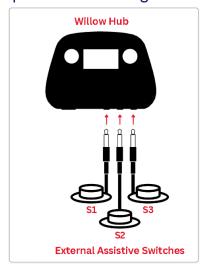


#### Cursor Setup on iOS Devices

Open your device's **Settings** > **Accessibility** > **Touch** > **AssistiveTouch** > Turn it on.



### **Optional: Connecting Assistive Switches**



Up to 3 assistive switches can be connected to the Willow Hub for user inputs.

The ports on the Hub for assistive switches are labeled S1, S2, and S3 and are standard 3.5 mm switch ports.

### Input Mapping

Interchangeable Willow Inputs		Duration	Link Mann	Maura	Compand
Assistive Switches	Hub Buttons	Duration	Hub Menu	Mouse	Gamepad
<b>S1</b>	Select	< 1 sec	Select	Left click	Button 1
		1-3 sec	-	Start Drag Mode	Button 3
		> 3 sec	Exit Hub Menu	Enter Hub Menu	Enter Hub Menu
<b>S2</b>	-	< 1 sec	-	Middle Click	Button 5
		1-3 sec	-	N/A	Button 6
		> 3 sec	-	Perform Center Reset	Perform Center Reset
<b>S3</b>	Next	< 1 sec	Next	Right click	Button 2
		1-3 sec	-	Start Scroll Mode	Button 4
		> 3 sec	-	Middle Click	Button 5
S1 + S3	Next + Select	< 1 sec	Exit Hub Menu	Enter Hub Menu	Enter Hub Menu
Joystick		-	-	Cursor movement	Joystick movement

### **Hub Menu Settings**

The Menu on the Hub Display provides a way to changing operating modes, adjusting settings, activate calibrations, and reset the Willow device. See the Input Action table for how to access and navigate the menu. See the User Guide for more details.



### Troubleshooting

#### **Cursor Issues**

If you are experiencing cursor drift (cursor is moving on device when joystick is not being moved), perform a center reset in one of the following ways:

# Option A: Trigger Center Reset Either by:

- Navigating through the Hub menu to:
   Calibrate > Center Reset
- Using a very long press of assistive switch 2

# Option B: Turn it off and then on again. Do not touch the joystick until "Ready to use" is displayed on the Hub Display.

- Disconnect/Reconnect Willow to power.
- Restart the device through the Hub Menu.
- Use a paperclip to push the reset pin on the Hub.

#### **Error Messages**

Error Code	Connection Error		User Action	
	Display	Joystick Sensor		
ERROR-001		•	<ol> <li>Check that the Willow interface cable is securely connected on both ends.</li> <li>Confirm the Willow Interface Cable is the right type.</li> <li>Contact support</li> </ol>	
ERROR-002	•		1. Disconnect USB, wait 30 second, reconnect USB.	
ERROR-003	•	•	2. Contact support.	

#### Support

If the issue persists, contact the maker of your device or Makers Making Change at <a href="makersmakingchange.com">info@makersmakingchange.com</a>