

ION Arcade Developers Resource

Release: ION Arcade Language 1.5
Date: September 17th, 2012

Introduction

Welcome to the ION Arcade developer resource for device connection.

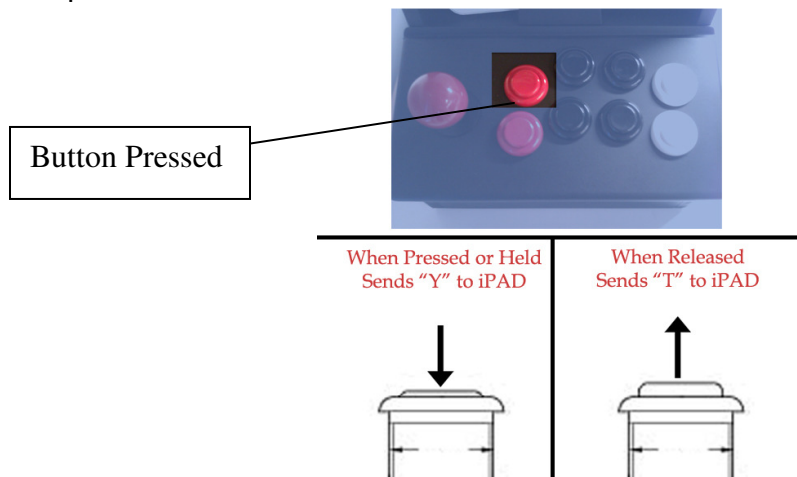
This Resource will demonstrate how to control your iPad application with ION Arcade hardware devices.

Communication

The ION Arcade family of products communicates through Bluetooth wireless technology, using a specific key map and protocol to talk with the applications.

For each button pressed, the ION Arcade hardware device sends a Key Down character (when button is pressed or joystick is moved directionally) and a Key Up character (when the button is released, or the joystick is moved from its location). The application being made to work with the ION Arcade hardware device will need to be able to interpret these commands, as Key Up and Key Down characters are necessary for successful Application Submissions.

Example:



Set-Up and Key Map

ION Arcade hardware devices have two states:

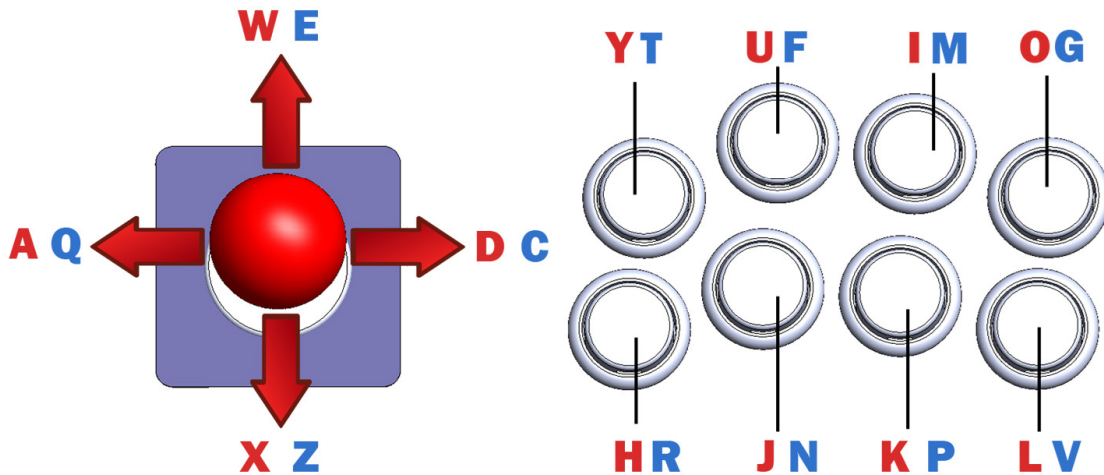
- **Pairing Mode** –This mode is engaged by holding the bottom row of buttons along with the top right button. At this point the buttons and joysticks 4 directions will send number characters to complete the iPad's challenge and response code and connect. These five buttons should not be assigned any "Press and Hold" functions together, as this will interrupt the users gaming experience, and require a re-pairing and connection. (If you have an ION Arcade hardware device see the

included Quick start Instructions for pairing info)

- **Gaming Mode** – This mode is entered the moment the ION Arcade hardware device is connected properly to the iOS device. At this time the ION Arcade hardware device will send the gaming key map. As explained previously, Gaming Mode sends a character to the iOS device to acknowledge a button pressed, and a character when a button is released. The keymap below shows the commands sent to the iOS device.

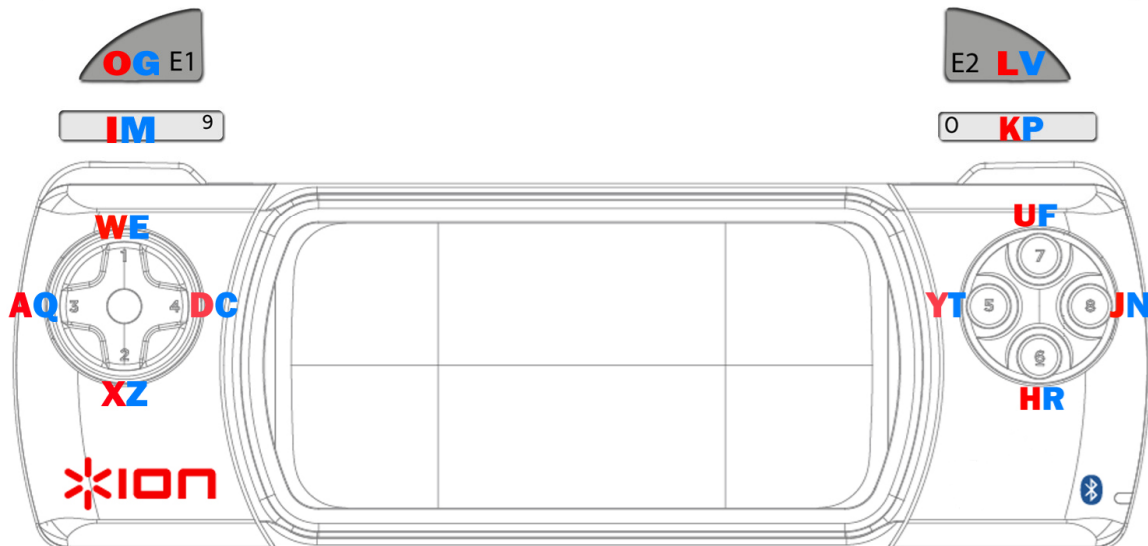
Button Commands

Letters written in **Red** denote Key Down, Letters in **Blue** denote Key Up for each direction



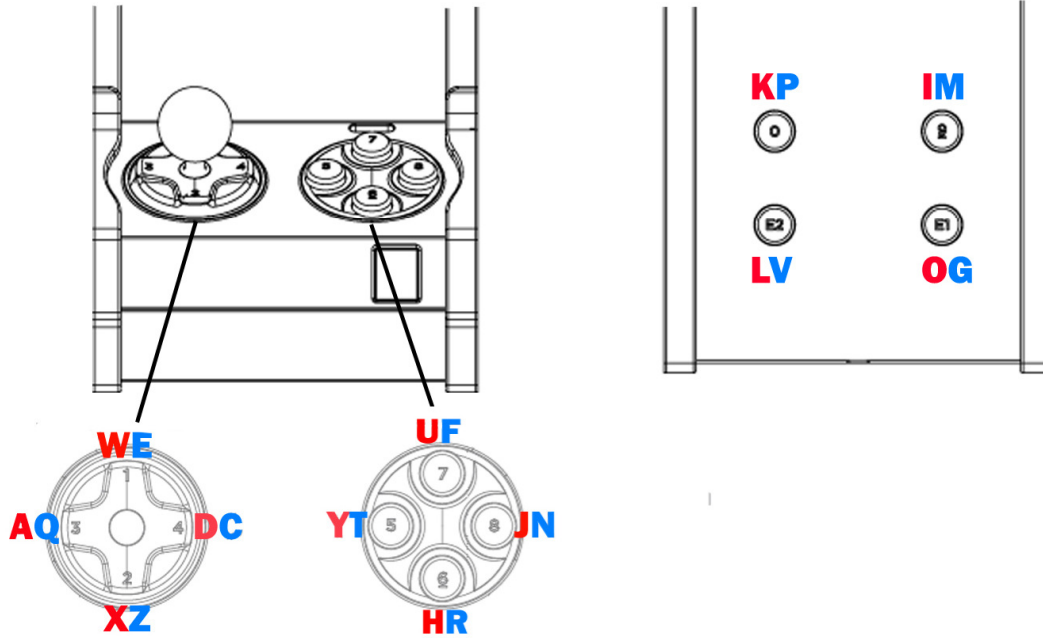
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Feedback

Please direct feedback or questions about this resource kit to **ionarcadedev@ionaudio.com**.