# HW4 User Manual

## **Important Safety Instructions**

When using HW4, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- 1. Read your manual and understand all instructions prior to use.
- 2. Never operate the HW4 Unit with any power supply except the internal AA battery.
- 3. To prevent damage to the unit, do not expose the HW4 Unit to rain or moisture. The environment should be limited to that appropriate for normal desktop computer operations.
- 4. Do not open or disassemble this product. You must follow the warranty instructions to have qualified service personnel repair the product. Opening the product voids the warranty.
- 5. Do not operate this product if it has been damaged from whatever means.
- 6. Use only a damp cloth for cleaning. Do not use liquid cleaners or aerosol cleaners.
- 7. Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, laundry tub, wet basement, or near a swimming pool.
- 8. Place the product on a stable stand or table. Falling on a hard floor may cause serious damage to product.
- 9. Never use liquids near this product or push foreign objects into it as this may result in damage to the product.
- 10. Refer the product for servicing to qualified service personnel under the following conditions:
  - A. If liquid has been spilled into the product.
  - B. The product has been exposed to rain or water.
  - C. If the product has been dropped or the enclosure has been damaged.
  - D. If the product does not operate properly by following the operating instructions.
  - E. If the product exhibits a distinct change in performance.
- 13. Do not use in the presence of high strength electric fields.
- 14. Do not use in the presence of flammable gases.

# **FCC Notice & Specifications**

**FCC Notice:** 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. In the event this device does cause harmful interference, please relocate the device as necessary to eliminate the interference. Report any such interference to the manufacturer.

FCC Identifier: WSE-HW4

### **Specifications**

| Physical Dimensions         | 5" x 2.75" x 1"                                    |
|-----------------------------|--|
| Equipment Type              | Type II  |
| Input Type                  | Type BF Applied Part                               |
| Power System                | Battery, 2 x AA Alkaline, NiMH or NiCad            |
| Battery Voltage Range       | 1.8V to 3.6V Combined voltage across 2 batteries   |
| Battery Life                | Approx. 30 – 40 hours                              |
| Input Channels              | 1  |
| Pickup Configuration        | Signal/Signal/Reference                            |
| Pickup Contact Material     | Saline Saturated Foam over Tin                     |
| Input Impedance             | >1M  |
| Input Coupling              | Capacitive   |
| ADC Resolution              | 12 bits  |
| Sampling Frequency          | 150Hz  |
| Filter Configuration        | Dual Bandpass                                      |
| Filter Frequency Ranges     | 4 Hz to 22Hz +/-3dB                                |
| Common Mode Rejection Ratio | >100dB @ 60Hz                                      |
|                             | Bluetooth 1.2 Class 2 (2.5mW) Uses Bluetooth SPP   |
| Computer Interface          | profile for UART emulation Communication Range     |
|                             | Up to 10 meters                                    |
| Temperature                 | Operation: +10 to +40 deg C                        |
| Humidity                    | Operation: 50% $\pm$ 20%, Transport: 50% $\pm$ 30% |
| Pressure                    | Sea level – 12,000 ft. all uses                    |

# **Using HW4**

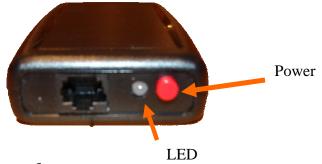
#### **Batteries**

Open the unit's battery compartment located on the bottom of the unit. Insert the 2 AA batteries included and replace the battery compartment cover.



## Basic On/Off Operation

The red Power button is located on the unit's front panel. Press the button once to turn the unit on. A red LED indicator will light to signal that the unit is powered on.



## Connecting to Bluetooth

Power on the HW4 unit. Place the USB Bluetooth dongle (included) into an available USB port on your computer. Wait until you see the Bluetooth logo and Windows indicates it is ready to use. The HW4 unit is pre-paired with the USB Bluetooth dongle and is now ready to use with your Play Attention software.

